THE MANKIND QUARTERLY

AN INTERNATIONAL QUARTERLY JOURNAL

dealing with Race and Inheritance in the Fields of

ETHNOLOGY · ETHNO- AND HUMAN GENETICS

ETHNO-PSYCHOLOGY · RACIAL HISTORY

DEMOGRAPHY AND ANTHROPO-GEOGRAPHY

Vol. VI, No. 4 · April-June 1966

7s 6d · $1.50

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

IAAEE REPRINTS

FINDINGS ON RACIAL DIFFERENCES BY MODERN SCIENTISTS

These Reprints provide scholars, students and others with easy access to important articles on the race question by leading scientists, originally published in specialized professional journals. Currently available are thirteen titles. Others are in preparation. All are priced at 25 cents a copy, except Nos. 11 and 12 which are 50 cents.

1. KLINEBERG'S CHAPTER ON RACE AND PSYCHOLOGY by Henry E. Garrett.
2. ZOOLOGICAL SUBSPECIES OF MAN by E. Raymond Hall.
3. ON THE NATURE OF PREJUDICE by A. James Gregor
4. ETHNIC GROUP DIFFERENCES by Stanley D. Porteus.
5. THE CONTROL OF EVOLUTION IN MAN by C. D. Darlington.
6. THE EMERGENCE OF RACIAL GENETICS by R. Ruggles Gates.
7. THE RACIAL HISTORY OF SCANDINAVIA by Bertil J. Lundman.
8. SOME NEGLECTED ASPECTS OF THE 'MINORITIES' PROBLEM by George A. Lundberg.
9. THE S.P.S.S.I. AND RACIAL DIFFERENCES by Henry E. Garrett.
10. SOCIAL SCIENCE TESTIMONY IN THE DESEGREGATION CASES—A REPLY TO PROFESSOR KENNETH CLARK by Ernest van den Haag.
11. THE INHERITANCE OF MENTAL ABILITY by Sir Cyril Burt.
12. THE AMERICAN MELTING POT: ITS MEANING TO US by John M. Radzinski.
13. PSYCHODIAGNOSIS, PROGNOSIS, SCHOOL DESEGREGATION AND DELINQUENCY by Clairette P. Armstrong.

Order from:

THE INTERNATIONAL ASSOCIATION FOR THE ADVANCEMENT OF ETHNOLOGY AND EUGENICS, INC.
P.O. Box 3495, Grand Central Station
New York, N.Y. 10017

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The 'Soul' of the Primitive

LUCIEN LEVY-BRUHL

Levy-Bruhl held that collective representations of primitive peoples are prelogical and mystical. Here he develops his theory of participation in relation to primitive conceptions of the human personality.

Cloth 35s Paper (Unwin University Book) 20s

Coral Gardens and Their Magic vols 1 & 2

BRONISLAW MALINOWSKI

A new edition of this pioneer study of the social customs and living patterns of the Melanesian people living on the Trobriand Islands in the Pacific. *Illustrated Vol. One 65s Vol. Two 45s*

ALLEN & UNWIN

RACIAL CONTOURS

The Factor of Race in Human Survival

By H. B. ISHERWOOD

Thought-provoking study of the racial nature of mankind and the natural inequalities of men.

Price 18s from booksellers or direct from

TIMES PRESS

DEPT. 'C,' ATHOL STREET,
DOUGLAS, ISLE OF MAN

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Rivista Di Etnografia

A yearly journal of

ETHNOLOGY, ANTHROPOLOGY, FOLKLORE,

CULTURAL ANTHROPOLOGY,

HISTORY OF RELIGIONS,

SOCIOLOGY, ETHNO-PSYCHOLOGY

Published under the auspices of
the National Research Council

Editor: Dr Giovanni Tucci

Subscription: 3500 lire (or equivalent) yearly

Rivista di Etnografia

via Belsito a Posillipo 17
Naples, Italy

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

VOL. VI, NO. 4 THE APRIL-JUNE 1966

THE MANKIND QUARTERLY

— mala opinio bene parta delectet —

EDITOR
R. GAYRE OF GAYRE, M.A., D.Phil., D.Pol.Sc., D.Sc.

HONORARY ASSOCIATE EDITORS
Professor HENRY E. GARRETT, Ph.D., D.Sc.
Professor MARIO CAPPIERI

FORMER HONORARY ASSOCIATE EDITORS
† Professor R. RUGGLES GATES, M.A., Ph.D., D.Sc., LL.D., F.R.S.
† Professor CORRADO GINI, LL.D., D.Soc., D.Sc., D.Econ., D.Soc.Sc.

ASSISTANT EDITORS
REINOLD GAYRE OF GAYRE
ROBERT KUTTNER, B.S., Ph.D.
ROBERT H. S. ROBERTSON, M.A., F.G.S.

HONORARY ADVISORY BOARD
Professor Santiago Alcobé, Barcelona, Spain; Professor P. C. Biswas, Delhi, India; Sir Raphael Cilento, Brisbane, Australia; Professor Alberto Xavier da Cunha, Coimbra, Portugal; Professor Gerrit Daams, Kent, Ohio, U.S.A.; Professor A. P. Elkin, Sydney, Australia; Professor Luigi Gedda, Rome, Italy; Professor Dr E. Hanhart, Zurich, Switzerland; Professor J. D. J. Hofmeyr, Pretoria, South Africa; Professor Charles C. Josey, Indianapolis, Indiana, U.S.A.; Dr Watson Kirkconnell, Wolfville, Canada; Dr Taku Komai, Kyoto, Japan; Professor Bertil Lundman, Uppsala, Sweden; Professor Frank C. J. McGurk, Villanova, Penn., U.S.A.; Professor Branimiro Males, Tucuman, Argentina; His Excellency Professor Gaetano Martino, Rome, Italy; Dr Clarence P. Oliver, Austin, Texas, U.S.A.; Professor S. D. Porteus, Honolulu, Hawaii, U.S.A.; Dr David C. Rife, New Delhi, India; Professor Alfredo Sacchetti, Naples, Italy; Professor M. R. Sahni, Panjab, India; Professor Herbert Sanborn, Tennessee, U.S.A.; Professor Walter Scheidt, Hamburg, West Germany; Dr John Scudder, New York, U.S.A.; Professor Sergio Sergi, Rome, Italy; Dr Audrey M. Shuey, Lynchburg, Va., U.S.A.; Professor M. J. Sirks, Groningen, Netherlands; Professor Torsten Sjögren, Stockholm, Sweden; Professor Sir Dudley Stamp, Bude Haven, England; Professor Charles C. Tansill, Washington, U.S.A.; Professor Giovanni Tucci, Naples, Italy; Professor Harry Turney-High, Columbia, S.C., U.S.A.; Professor H. V. Vallois, Paris, France; Dr R. J. Walsh, Sydney, Australia; Professor K. Robert V. Wikman, Abo, Finland.

Published by
THE MANKIND QUARTERLY
1 Darnaway Street, Edinburgh 3, Scotland

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

VOL. VI, NO. 4 APRIL-JUNE 1966

CONTENTS

THE DILEMMA OF INTER-RACIAL RELATIONS
by R. Gayre of Gayre 183

RACE AND ANTI-SOCIAL BEHAVIOR IN AMERICA: A CLOSER LOOK
by William Flax 202

SIGNIFICANT EVIDENCE ON INHERITANCE AND HYBRIDISATION: PART I
by G. Pantel 219

BOOK REVIEWS 239

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE DILEMMA OF INTER-RACIAL RELATIONS

By R. GAYRE OF GAYRE

At the present time the problems of inter-racial relations in Africa and elsewhere have become even more difficult to solve than they have always been because they are being exploited by political forces, particularly communism, and by organisations influenced by communist political philosophy. To the emotional atmosphere thus created is added a puerile kind of name calling directed against those "Fascists," "Nazis," "white supremists," "colonialists" and "imperialists" who refuse to accept the proposition that integration is the only moral solution to the problem. This has deterred many qualified people from questioning the powerful propaganda of integrationism.

The following outline is an attempt to analyse various solutions or alleged solutions to the difficulties which arise when different races come into contact with each other.

When human codes of conduct only concerned obligations within the family, clan, tribe or folk a simple solution was applied which left behind very little to trouble later generations. This was the destruction of the weaker racial units by the dominant stock—and within living memory some of the most primitive tribes of men still practised it.

The English-speaking peoples used a modification of this solution against the Amerindians, the aboriginal Australians and the Maoris. It is often forgotten that scalping was used by the Europeans in America as a means of accounting for Red Indians killed—for which payment was made—just as rats' tails are used nowadays. The practice was developed by the Indians in reprisal and in their own self-defence. The Amerindians were either destroyed or driven steadily into more and more inhospitable lands where they were almost wiped out by starvation—and even at the present time a trace of these conditions is still reflected in the average longevity of the Canadian Amerindians, as low as thirty years in 1965, and in their annual income, only about $1000 in most cases, very few earning over $2000. Although the reserves into which the Amerindians had been driven had become recognised as their own

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

territories, when they became economically valuable to the Europeans these lands were sometimes seized and the inhabitants were rounded up and, in one notorious instance, were sent on a death march the horrors of which equalled anything the Germans did in the last war. It is therefore hardly surprising that in the American War of Independence many Red Indians supported the British cause, and in the American Civil War some aided the Confederacy against the highly moralistic, "liberal," anti-slave northern Yankees.

Similarly short shrift was given to the aboriginal Australians in the regions now occupied by the Whites. The Black Fellows have only survived because they are specialised enough to live in deserts of no interest to the Whites. In New Zealand the Maoris resisted the Whites but were defeated and driven off their best lands. They have only survived in those parts which the English-speaking invaders were at that time unwilling or unable to occupy. Only now have their numbers recovered to about what they were a century ago.

The Canadian Government has found or blundered into the same kind of solution in the far north, where the ruthless exploitation of land within the last decade has so restricted the Eskimo economy that it has brought starvation and death to large sections of the population.

These examples are mentioned to indicate what one racial stock—even composed of people with the highest religious and moral principles—is apt to do when its own interests or survival are at stake. I am not concerned here with allocating blame but merely with trying to analyse the principles underlying inter-racial relations in the past. Obviously these historical events are not the responsibility of those Whites who now occupy the countries in question, but the fact remains that the territories they inhabit belonged to the ancestors of those peoples who are now in the American and Canadian reserves, the Australian deserts, or the restricted areas of certain recognised native districts in New Zealand.

This then is one way of dealing with a native problem—wipe them out, or kill most of them and drive the remainder into a restricted living space so that they give no more trouble.

It will be seen that the survival until the present time of the Amerindians, the aboriginal Australians and the Maoris is partly or largely due to the recognition of territories in which they have been allowed to live. The deserts provided sanctuary for the native Australians but the other native populations took refuge in reserves of one kind or another which they managed to salvage from the wreckage of their countries under treaties with the incoming English-speaking peoples.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In none of these cases has a system of integration—and certainly not cross-breeding—been officially encouraged. All the dominant European peoples have practised separate development with as little racial integration as possible.

If the Whites entering these countries had merely occupied waste lands—which would have been the worst in every respect—not only would they have been much fewer in number than they are today but the native populations in possession of the richer lands would have been numerically very much greater. Indeed they might even have been more numerous than the Whites, as is the case in other territories where the incoming Whites have been much less ruthless than, in particular, the English-speaking settlers in the United States. However, under American, Canadian, Australian and New Zealand administrations the native populations have declined, in a disastrous manner except for the Maoris.

It is therefore quite astonishing that among the peoples who are most condemnatory of the present racial policies of the Whites in South Africa are the Canadians, Americans, Australians, New Zealanders, and the British—the people whose colonists carried out the policies already described. This is in spite of the fact that these peoples are in no small measure enjoying the results of ruthless aggression such as was only equalled elsewhere by the Spanish in Central and South America, although neither the Spanish nor the Portuguese were able to destroy the Amerindians in the way the English-speaking peoples destroyed the natives of their colonies, and so the Europeans are still a minority in Spanish- and Portuguese-speaking America. Among these English-speaking peoples in Canada, America and Australasia, who are so clamant in their condemnation of the Rhodesians, South Africans and Portuguese in Southern Africa, there seems to be no great disposition to restore even a tithe to the native populations whom they have so deeply injured—as they ought to do if their own principles are to be accepted as genuine.

In the United States another racial problem is posed by the Negroes, who were first brought to that country as slaves—following a well known pattern of race relations. But mammoth organisations have been mobilised, mass propaganda has been released, and legislation has been enacted, in favour of the Negroes who, unlike the Amerindians, have no hereditary rights in the land—although that does not mean they have no right to fair treatment. In further contrast to the native Americans the Negroes have increased in number under the rule of the English-speaking population. It is also surprising that the well-being of the Negroes is in every way better catered for than is that of the Amerindians, whose claims are equal on moral grounds and immeasurably higher on historical and legal premises. We might wonder at this

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

racial discrimination—which is common to liberally minded Americans and to anti-"racialist" pressure groups—were it not self-evident that only the Negro problem fits into the world pattern of international political warfare directed against the Western Countries by communism, aided and abetted by allies and well-wishers in all the European countries, and given the power it possesses by well-meaning but simple-minded masses of decent people who lack the ability to discriminate and from whom the facts from which to reason and form wise judgments are in any case withheld.

In the course of history a widely practised form of inter-racial relationship, even between stocks of basically the same origins, has been the conquest and enslavement of the weaker racial type by the dominant element. Thus the Romans enslaved the Germans and Celts, and the Germans enslaved the Celts and Slavs. Indeed, enslavement of the weaker tribes and clans even occurred within the same linguistic group. In contrast to the vertical division between one group and another which occurs when the weaker group is allowed to survive in reserves, the practice of conquest and enslavement results in a horizontal stratification or caste system. This horizontal division is much more marked when one race conquers another than when the two groups are distinguished merely by linguistic or tribal differences. The classical example of the caste system is provided by India where the Caucasoid Hindus or Indians conquered the sub-continent and reduced the largely Australoid indigenous black population to slavery and thraldom. The caste system was established so early and has been so long in existence that it has became fortified by legal, social and religious sanctions. It has survived in full vigour to the present time in spite of missionary opposition and legislation passed against it under Nehru. That it is racial in origin is obvious since everywhere in India the caste Hindus are fairer than the outcastes. Indeed, the high caste Hindus in the north are clearly Caucasoids or Whites even to this day.

In the expansion of European power from the sixteenth century onwards a widespread conquest of Negroes occurred during which they were shipped as slaves from Africa to colonial territories especially in America and the West Indies. There the same kind of caste relationship existed between the Whites and the Blacks. Miscegenation was frowned upon, and although it occurred—as it must in such situations—the hybrids passed into the mass of the enslaved class and formed no part of the dominant Whites.

The caste system can rarely survive indefinitely, however, when the ability of the two stocks is very nearly the same, even though the defeated stock usually shows some defect which has resulted in subordination to the conquerors. Thus, although the Germanic

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

or Gothonic conquerors of the southern half of Britain and most of the continent of Europe established themselves as a nobiliary caste which had the sanction of custom and law, and was supported by economic power, the difference between the two stocks has now largely disappeared. Since at least the fifteenth century able individuals have worked their way into the upper classes and in time have become members of the aristocracy. For this reason very few of the present nobility of England can trace their ancestry back to the Norman conquest, although much of the nobility of Scotland dates from that period—indeed from considerably earlier—since Scotland was much less affected by these invasions.

However, if the conquered are markedly inferior to the conquerors in those abilities which contribute to the technological development of the dominant civilisation it is probable that they will always remain an outcaste element at the bottom of the social structure. Although miscegenation with the conquerors will by genetic segregation tend to produce elements which rise higher than the mass of the serf classes and to some extent vie with the conquerors, this is merely because they have inherited the ability from their conquerors.

These principles have in fact operated in the United States and parts of Central and South America where the Negroes are still at the base of society, although from time to time intellectuals and professional men come into prominence who are usually described as Negroes but are actually hybrids with Caucasoid ancestry. Of course, since there is overlap in every trait between different populations it follows that the upper Negro element will often show higher ability than the lower White element, and so occasionally some able Negroes who have little or no Caucasoid blood will come into prominence. Generally, however, the leaders of any civilisation showing a markedly specialised form of development—such as the European civilisation, which is based upon dynamism, creativeness and accumulation of material things—are those who have created it, not aliens who have shown no inherent ability in that direction.

It seems that this horizontal division cannot be obliterated, however desirable that might be on ethical or religious grounds, because it results from something much more profound than a mere accident of history. The Negro slaves of the Americas were there not as a result of one battle but literally thousands. Nor was their capture merely due to the fact that the Europeans had firearms and the Negroes had not—although that fact alone indicates the difference in aptitudes and development between the two races. In fact many of the enslaved Negroes were captured and sold to the European slavers by Negroes of more advanced, powerful and aggressive tribes. The slaves of America and elsewhere were selected for inability to preserve their independence, as their

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

enslavement must have been due to such factors as lack of courage, lack of numbers—through failure to be successful in their environment—or lack of intelligence to organise resistance or escape, which would have made it not too difficult for the aggressive tribes to conquer and enslave them. In view of this, as long as any degree of natural selection exists the Negroes of the United States can never be expected to compete successfully against the Whites in their industrial and technological society, and so they are virtually condemned to a premanently inferior social position.

It is this self-evident fact which the forces of liberal thinking—and of much religious thinking—in the United States and elsewhere are being mobilised to overcome, and every form of pressure, including Acts of Congress and rulings of the Supreme and Federal Courts, is being applied in the attempt. But unless the Negroes are to be specially privileged—which surely no democracy dedicated to egalitarianism can tolerate indefinitely—it seems quite impossible to alter their position in society which results from their failure to equal the performance of the Whites in practically all activities fundamental to the technological civilisation of a Western state. Thus integration, which is the basis of this misdirected policy, places the Negroes in direct competition with the Whites, with the result that the majority of them are worsted and indeed psychologically injured in a very serious manner. In fact the racial hate welling up from the Negroes who are victims of this integration policy is evidence of the great damage which is being done. Of course the racial egalitarians—the so-called liberals—do not accept this because they will not have anything to do with the facts of heredity. Believing that nurture is more important than nature, and that education and improved social conditions can work miracles, they are the modern followers of Lamarck—despite the fact that his doctrines of environmentalism are destroyed by every genetic experiment which takes place. These people occasionally turn for support of their point of view to certain well publicised sociologists and geneticists—who appear to suffer from induced schizophrenia, because as long as they deal with infra-human species they adhere to the Mendelian laws of heredity and the facts of nature but when considering man they abandon all that and apply an entirely different set of Lamarckian nurturist theories. While this would be astonishing in objective scientists it is not surprising in these individuals who invariably have pro-communist leanings. Indeed many of them are contributors to the *Daily Worker* and similar communist or communist front publications—and no communist can accept the implications of the laws of heredity when applied to man as they would render his political philosophy entirely worthless.

No matter how eminent a scientist may otherwise be, his

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

theories cannot be accepted if he subscribes to a doctrine which denies the application of science to man and so prevents him from giving true and unbiased testimony—as is the case with communists and communist sympathisers. It is therefore relevant to know if the expert witnesses in any scientific inquiry subscribe to doctrines which prevent or are likely to prevent them from applying purely scientific genetic principles to man unfettered by considerations of political dogma. For this reason such widely publicised people as Ruth Benedict, Franz Boas, Leslie C. Dunn and Otto Klineberg, who have all been contributors to the *Daily Worker* and have participated in other activities generally considered favourable to communist ideology, and Theodosius Dobzhansky, a supporter of the American Council on Soviet Relations and an executive committee member of the American-Soviet Science Society, can not be considered unbiased authorities on racial differences in man.[1] If these communist or communist-orientated sociologists and scientists are ignored there are very few others to sponsor the notion that nurture is the key to the problem of race relations—or even that it is of equal importance with heredity.

It will thus be seen how very far astray are the modern nostrums for the solution of the racial problems of countries such as the United States where society is divided horizontally into two quite distinct stocks which are unequal in aptitudes, desires, energy and acquisitiveness. A solution to these problems must be found, but it will never be obtained from falsification of the facts of heredity and racial history. Those who persist in approaching this matter from the racial egalitarian point of view do so in such an aura of liberal moralising that there is a very great danger that they may continue to be listened to, which will be very much to the disadvantage of the backward and undeveloped Negroid stocks whom they ostensibly want to assist. In the past, charity, love and Christian consideration have been exercised where possible to shelter the weak from the full effect of unequal competition and the hard realities of life, but it is a curious phenomenon of the present time that those people who so loudly—and sometimes so impudently—claim a monopoly of virtue for desiring to aid the backward stocks of mankind are the very people who are insisting upon exposing the Negroes to an unequal struggle with the Whites. This can only end in tragedy for the Negroes wherever they become the victims of these theorists who are determined, no matter who suffers, to try to establish their quite unproved—indeed untrue—doctrine that with changes in social and physical environment they can equalise all races of men.

[1] This information is taken from *6000 Educators*, Circuit Riders, Cincinnati, Ohio, 1959, Vol. I. No doubt equally revealing information on certain other persons will be found in Volume II.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Since mankind is divided into races each of which arose by natural evolutionary processes through grappling with the particular problems presented by its own habitat, it is self-evident—and has never been called in question before the creation of the sociological theory that man is above nature—that man is made to live in groups of his own kind, competing against his kin and using an intellectual and physical apparatus which is common to all within his group. Scientific demonstration is not needed for any honest man of common sense to realise that this is manifestly true, although ample evidence for these premises could be produced.

In contrast to the caste system of horizontal segregation involving slavery or serfdom of some kind for the weaker strains, another solution to man's racial problem is the natural system of vertical division or separate development of ethnic units. In fact there are only a few—mainly partial—exceptions to this form of development. These include the gypsies, the Jews—until recently—and to some extent the Scots, of whom as many as 30,000,000 are probably distributed throughout the English-speaking world compared with a home population of just over 5,000,000. Despite their world-wide *diaspora,* however, the Scots have always remained firmly based on their own homeland; and in recent years the Jews have re-established a homeland for themselves. Only the gypsies have remained an entirely dispossessed people. In general, all the European peoples and the Negro tribes and nations, as well as many of the peoples of Asia, have carved out living spaces for themselves, in each of which the *folk* have developed as a distinct entity. In fact, most of the states in existence today, particularly the more stable ones, have evolved in this way.

Thus there should be no need to stress the naturalness and the desirability of this form of evolution. Yet the countries of Southern Africa in which this separate development is taking place are being assailed as though it were something unnatural and contrary to accepted custom. The application of the principle of separate development in Southern Africa must be right if practically all peoples have developed in this way, and if those countries in which this evolution has been largely unimpaired have less communal strife than occurs, for instance, in India, where this natural development has been impaired with the result that constant communal trouble leads to murder, riots, looting, and burning down mosques, temples and bazaars. Human society is never perfect, and no system of government can ever be perfect either. In satisfying the needs of one part of a community, inconvenience and sometimes even injustice may be suffered by another. From some points of view, therefore, there may be objectionable aspects to what is happening in the course of the application of this principle in Southern Africa, but this does not invalidate the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

principle. Where hardship or injustice is created, efforts must be made to ameliorate this without vitiating the principle itself.

Separate development is at present found in two stages in Southern Africa. In Rhodesia the foundations have been laid by the Group Areas Act, although the results have not yet emerged, but in South Africa the principle is well established. In Rhodesia there are major tribal groups—such as the conquering Matabele invaders and the more indigenous and more peaceful Mashonas—which constitute potential nations. These have retained their tribal form despite the bad effect of British rule which has often destroyed it elsewhere in Africa—except in some restricted areas such as parts of West Africa like Nigeria where, thanks to Lord Luggard, the great exponent of separate development and indirect rule, this erosion of native culture was prevented.

If it is permitted by enlightened government, the natural development of the greatest benefit to Rhodesia would be the emergence of three or more distinct ethnic zones. One would be for the Whites, whose considerable industrial and urban development would be backed by large-scale farming enterprises, and there would be others for the main tribes under paramount chiefs—supported by their councillors right down to the heads of kraals. It might be necessary for the smaller groups to be administered by some kind of trustee authority of the Rhodesian Government in order to avoid their extinction under the cultural and political domination of their more powerful neighbours. Three or more semi-autonomous governments might thus emerge, one White and the others Black, under a Rhodesian Government in which the Bantu would be represented, perhaps by a Chamber or Estate of Parliament for the chiefs and councillors of Rhodesia's major Bantu nations. It might also be necessary to increase the number of Estates so that other interests would be represented in the legislature. This kind of development might well leave the final control in the hands of the more advanced communities—as would be necessary in any case for the welfare of a progressive agrarian and technological state. With adequate representation of the organic elements of the whole country it is unlikely that such a government would be oppressive to any particular community.

There are at present upwards of half a million aliens working in the industries established in Rhodesia by the Whites. These rootless people are unrelated to the tribally organised Bantu and have no permament place in the country. Under a properly planned economic and tribal policy they should be returned to their own countries. Incidentally, much of the sedition with which the Rhodesian Government has to deal would be automatically removed by the adoption of this measure, as the agitation is largely sponsored by these aliens living in the urban regions.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In South Africa itself the tribal structure was rather more intact than elsewhere, so the policy of separate development and indirect rule is more firmly established and in some areas is approaching successful completion. Already the Transkei, the state of the Xhosa nation, has come into being, and to the north in Zululand another nationality will be given self-government under its paramount chief. There is a possibility of somewhat parallel developments in the northern Bantu Homelands, and in South West Africa the Bastards of Rehoboth, who have long had their own Volksraad, are a small self-governing ethnic unit. However, much of South West Africa must eventually become some kind of protectorate for the Bushmen, whose salvation will largely depend upon the actions of the present Government of South Africa. Some special arrangement will likewise be required in Namaland for the Hottentot nation.

In addition to these self-governing nations there are the three British High Commission territories, to which Britain has given and is giving independence. If they are to survive at all they will have to come to terms with South African policies—and some of them will certainly be willing to do so. We may well ask what these territories are if they are not Bantustans already, as they fit exactly into the pattern now well on the way to completion. Thus Swaziland forms the homeland for the Swazis, Basutoland for the Sothos, and Bechuanaland for the Tswanas—although some of this territory should be appropriated for the Bushmen to whom it rightly belongs.

Within South Africa, therefore, Bantu and Khoisan peoples are progressing towards nationhood within their own homelands where they are protected from White competition and have the opportunity of developing their own institutions.

It is said in condemnation that South Africa does not intend to give these states independence in foreign policy and defence, but this is not surprising as any one of them could become a South African Cuba or Zanzibar and open the country to the possibility of hostile action from powers outside Africa. In any case Britain does not give absolute independence to Northern Ireland, the Isle of Man, Jersey, Guernsey or Sark, which are all self-governing under the Crown, but their defence and foreign policies are controlled by the British Prime Minister. What Britain does in relation to highly advanced White ethnic groups cannot therefore be so heinous when applied to backward and emergent peoples in Africa who are liable to be exploited by communist imperialist powers and other troublemakers.

The advantages of separate development are overwhelming. For instance, the people are ruled by their own leaders instead of by outsiders—whereas, in an integrated state with two quite different stocks having radically different abilities, the ablest people of the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

weaker group would, despite all their efforts, prove to be inadequate in competition against the more able members of the dominant racial strain. Under one system racial strife is avoided but under the other is inevitable, if only because of the envy and hatred shown by the less well endowed group who find themselves inadequate in the face of overwhelming competition.

Administratively everything is made much easier by separate development. Thus, the vernacular is used for communications and education; one set of local customary laws is known to everyone; and the principles governing customs and ways of doing things are common to the whole nation. There is no minority to feel aggrieved or majority to believe the weaker group is holding back their own progress, as is now the case in Britain and the United States over schooling and other matters where non-Europeans have settled in formerly all-White neighbourhoods—where, moreover, they know they are greatly resented by the native Whites.

Separate development also overcomes great inherent difficulties in certain vital practical matters—for instance, blood transfusion. The integrationists may go on reiterating that we are all the same under the skin but in fact nothing could be less true, although no doubt they expect that, according to the Goebbels maxim of the great lie, the more often they repeat it the sooner it will be accepted as true—and in this respect they have had some success. The racial differences between the great groups of mankind are not restricted to skin colour but involve dozens of features including brain formation, natural intellectual abilities and, not least, blood groups. With regard to racial differences in blood groups, Dr John Scudder has shown that the practice—found in "integrated" or would-be "integrated" countries—of not keeping blood banks racially separate is very dangerous, as the result of using blood which is not of the same racial group as the patient can be lethal.[2] This problem is of course greatly reduced where the hospital services are serving mainly one racial stock rather than a multi-racial community.

Many uniform and easily applied systems of education are also possible under separate development, as a tightly knit ethnic unit will obviously present far more common factors of natural ability and temperament. Furthermore, a system of education which is much fairer to the pupils and students is possible under separate development than is the case when such wide variations have to be provided for that they exceed the ability of the machinery of

[2] "Sensitising Antigens as Factors in Blood Transfusions" by John Scudder, Shivaji B. Bhonslay, Aaron Himmelstein and John G. Gorman, THE MANKIND QUARTERLY, Vol. I, No. 2, October 1960, pp. 89-104.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

education to deal with them all as adequately as is possible where the variations are less pronounced.

There is overwhelming evidence of marked differences in aptitude and ability among the races, particularly between the Whites and Yellows in comparison with the Blacks. Nevertheless, great efforts have been made to disprove this, and in order to do so sociologists intent upon denying the truth of heredity have undertaken and given widespread publicity to limited studies of no representative value, as well as to wider studies in which either certain essential facts have been suppressed or the subjects have been from selected elements of the Negroid races. The fact remains, however, that the majority of studies have shown that there are great differences in mental ability between the races, and that when Blacks and Whites are judged according to ability to operate in the milieu of White ideas and aptitudes the Europeans are decidedly in the lead.[3] This should not surprise anyone. Of course, if the two races are judged by standards appropriate to Negroid aptitudes the reverse is true.

[3] For a thorough review of this subject see *The Testing of Negro Intelligence* by Audrey M. Shuey, J. P. Bell, Lynchburg, Virginia, 1958. See also the following studies published in THE MANKIND QUARTERLY: "Klineberg's Chapter on Race and Psychology: A Review" by Henry E. Garrett, Vol. I, No. 1, July 1960, pp. 15-22; "A New Anthropometric Approach" by S. D. Porteus and J. P. Kleman, Vol. I, No. 1, July 1960, pp. 23-30; "Psychological Test Score Differences and the 'Culture Hypothesis'" by Frank C. McGurk, Vol. I, No. 3, January 1961, pp. 165-175; "School Achievement of White and Negro Children of the Same Mental and Chronological Ages" by R. T. Osborne, Vol. II, No. 1, July-September 1961, pp. 26-29; "Psychological Tests of the Kalahari Bushmen" by Helmut Reuning, Vol. II, No. 4, April-June 1962, pp. 265-273; "Misuses of Overlap in Racial Comparisons" by Henry E. Garrett, Vol. III, No. 4, April-June 1963, pp. 254-256; "Dobzhansky's 'Equal-Opportunity' Concept" by H. George Classen, Vol. IV, No. 2, October-December 1963, pp. 111-117; "Cultural Bias of Psychological Test Items" by R. T. Osborne, Vol. IV, No. 3, January-March 1964, pp. 134-137; "Australid 'Assimilation'" by S. D. Porteus, Vol. IV, No. 4, April-June 1964, pp. 187-196; "Human Genetics and Psychological Differences" by Donald A. Swan, Vol. IV, No. 4, April-June 1964, pp. 197-201; "Genetics and Intelligence" by Henry E. Garrett, Vol. IV, No. 4, April-June 1964, pp. 202-204; "Klineberg's 'Negro-White Differences in Intelligence Test Performance'" by Henry E. Garrett, Vol. IV, No. 4, April-June 1964, pp. 221-222; "The Intelligence of the African Negro" by Gérard Wintringer, Vol. V, No. 1, July-September 1964, pp. 35-44; "I.Q. and School Achievement of Negro and White Children of Comparable Age and School Status" by Henry E. Garrett, Vol. V, No. 1, July-September 1964, pp. 45-49; "Psychodiagnosis, Prognosis, School Desegregation and Delinquency" by Clairette P. Armstrong, Vol. V, No. 2, October-December 1964, pp. 63-80; "Problems of Aboriginal Mentality" by S. D. Porteus, Vol. V, No. 3, January-March 1965, pp. 123-130; "Race and Mental Differences" by Donald A. Swan, Vol. V, No. 4, April-June 1965, pp. 196-203; "Race, Psychology and Education: Wilmington, North Carolina" by H. M. Roland and Donald A. Swan, Vol. VI, No. 1, July-September 1965, pp. 19-36; and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In view of these differences it can be seen that it is not a friendly, charitable, or Christian, act to enforce Black and White school integration as it unjustly consigns the Negro children to scrambling continually along behind and trying to keep up with the White children who are naturally suited to the prevailing educational system. Of course there is overlap, so that White morons are easily surpassed by average Negro children, but in general the Negro children are at a disadvantage at every mental and educational level, except when they are very young.

This is seen not merely with White and Negro children but also, for instance, in the great tribal area of Bastar in Central India where tribal children attend the same schools as Hindu children. The black Tribals, who are probably more Australoid than Negroid, start equal to—indeed a little in advance of—the brown-to-fair Caucasoid Hindu children. Very soon, however, the Hindu children draw level and pass them, so that after eleven years of ago the gap widens consistently.

Thus, if great distress and psychological harm are to be avoided and the best type of education is to be provided for each ethnic group, segregated education is greatly preferable and from a moral point of view is the only system which can be justified, although some clerics have claimed, when denouncing segregated schools in the United States, that the school integration problem is a moral issue—but this seems to be a perverted kind of morality based upon complete misunderstanding of the biological factors involved. Morality is surely on the side of giving the most suitable kind of education to each human stock in its own environment, so that each individual competes fairly against others of the same ethnic group instead of, perhaps, against individuals of a strange race which has had thousands of years' start in the evolution of the mental processes which have led to the development of modern Western education.

Perhaps quite rightly if human happiness is considered, the Negroes have never shown interest in invention and creative work of the kind which has led us step by step towards the industrial revolution and modern technological civilisation. The events which led to our present form of civilisation were not mere accidents of history but occurred because the minds of Caucasoid men have developed along these lines from an early period—and the same is true of the Mongoloids whose evolution has been similar. In the

"Reading Achievement of White and Negro Pupils in Certain Georgia Schools" by Bernice Cooper, Vol. VI, No. 2, October-December 1965, pp. 81-85. On the psychological differences between the races of man see also: "Racial Psychology" by Ilse Schwidetzky, Vol. II, No. 1, July-September 1961, pp. 10-12; and "The Family of Mankind: Some New Light?" by Elizabeth E. Hoyt, Vol. II, No. 1, July-September 1961, pp. 13-15.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

course of time these characteristics have become more and more emphasised by natural selection as survival has come to depend upon them. To throw human beings—with all their delicate sensibilities—from an entirely different line of evolution into direct competition with the Caucasoids on their own ground, where they have all the advantages, is in my opinion the height of cruelty, and there is therefore nothing moral but rather the opposite about the demands for integration. Not only is segregation necessary for the well-being of all, but the further it is developed the better—and I believe that only by separate development is the optimum degree of well-being attainable. No matter how good are the schools and their staff in a horizontally divided society, the races are so close together in the same communities that a degree of unnecessary competition occurs with harmful results. Certainly in that milieu segregated schools are better than integrated ones, but the ideal is only attained when a particular region is inhabited exclusively by people of one ethnic stock who compete solely against each other in the schools and colleges, with the result that an élite emerges which assumes the leadership of the people—an élite which can feel satisfaction in its leadership, and a people who can be proud that men like themselves are at the apex of their national world. This is in fact what has happened where Britain and other colonial powers have given independence to overwhelmingly Negroid states like Nigeria, Ghana and the rest, but it is manifestly impossible in South Africa and Rhodesia as they contain too many Whites and are modern technological states whose continued well-being and development depends upon their European populations. Yet the same effect can be achieved by dividing these states into areas to which modified independence can be given, and the development of indirect rule through the growth of separate national units in South Africa is in fact doing this—despite a campaign of misinformation alleging it to be some kind of enslavement. Far from this development being to the disadvantage of the Bantu, it is actually demanding considerable sacrifice by the Whites. For instance, the Europeans have to withdraw from the town of Umtata, the capital of the Transkei, within a period of time—and this means losing their businesses. There are, moreover, other areas where Whites are not allowed to settle and own land. A corollary to this, legislation to limit the number of household servants to one in White areas, has caused great indignation among certain White housewives who would prefer integration and the large servant force it would put at their disposal. This draws attention to the fact that it is the integrated society which exploits the Black man. The huge numbers of "coloured" immigrants who have entered Britain since the last war are mainly filling labouring jobs which the British—particularly English—workers would not do, and many of them are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

living in property already condemned as unfit for occupation by the native Whites. Not only do left-wing publicists and churchmen strongly support "coloured" immigration in their attempts to justify and prove their quite unfounded theories—for which the immigrants are nothing more than guinea-pigs—but certain employers are equally favourable to it. In South Africa a large part of the opposition to Apartheid by business and mining interests in places like Johannesburg is probably for the same reason—the desire for adequate supplies of cheap labour—but the criticisms of separate development are cloaked under the guise of "moral" indignation and "liberal" principles.

It is as well to conclude this discussion of separate development by quoting the Australian aboriginal boxer George Bracken on the subject of his people's development:[4]

> In my opinion what is needed now to train the aborigines to live in a white world, as they must, is to give them a self-contained community of their own.
>
> This should take the form of an aboriginal township, complete with all the shopping facilities, housing and schools found in any community.
>
> With this difference: Every official, every teacher, every business-man in this community would be an aborigine. It would be an experimental township teaching citizenship to aborigines—with aborigines, already trained in the white world, as the instructors.

Bracken continues:

> White Australia has come a long way since Governor Philip met his first aborigines. Is not Black Australia also entitled to some advancement?
>
> In fact, it has been held back as a deliberate policy. The outback needs its cheap labour force and the aborigines have been compelled to provide it. Only recently has this been reversed in any way.
>
> But the aim of this suggested advance must not be to blend white Australia with black.
>
> My own view is that total assimilation would be a pity because it would remove from the Australian scene one of the differences that make Australia an individual country.
>
> My people don't think white thoughts.
>
> Our culture is not yours either. It has a truly Australian

[4] "The Aborigine," *The Australian International News Review*, 28th May 1965, pp. 19-20.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

individuality about it and a vigour which can, and does, stimulate yours.

The painting of Albert Namatjira, for one example, showed European painters that there were other ways of looking at the Australian scene than theirs.

Aboriginal music and dancing, again, is uniquely ours.

The political motives—as well as the extent to which those who oppose separate development represent moral values—are obvious from this final quotation:

> Under the present system, and with the efforts of a lot of well-meaning people—and a few, quite a few, not so well-meaning—we aborigines are being pressured into some kind of off-white uniformity, and never mind what *we* want.
>
> Deep down the aborigine does not want to be pushed into some shape that he rebels against as an individual, nobody does! He wants to be able to make his own way of life.
>
> The pressures brought to bear on him can make him ready material for the trouble-makers and the groups who like to jump on the social bandwaggon of "working for the aborgines' welfare."
>
> Much of the latest agitation about the aborigine is stirred up by communists and other left-wingers who like to make trouble by becoming the self-appointed champions of the under-privileged black man. The aboriginal soul is not communist but highly individual. At bottom he wants to retain and foster this individuality.
>
> He *is* under-privileged and teaching him to live on handouts until somehow he is assimilated, or forgotten, is not the answer.
>
> It breeds resentment. That resentment is strongest against those who try to use the aborigine for their own purposes, taking advantage of his position.
>
> One such group is the communists, who hypocritically take over our cause on the pretence that they intend to help us. Their only genuine intention is to use us for their own ends, as the reds and other left-wingers have operated in the United States.

Besides South Africa and Rhodesia some mention must be made of Angola and Mozambique—the Portuguese territories of Southern Africa—where we find an interesting situation. The Portuguese have repudiated segregation and stand firmly for integration. They are as much integrationists as are all those nurturists in the United States, as well as in Britain and other European countries, who are such vocal exponents of integration. Indeed, they are among the strongest critics of the policy of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

separate development. This, however, has not endeared them—as one might in all innocence have expected—to the advocates of integration, who denounce them as "colonialists" and "white supremists," and point to the fact that under the Portuguese system the Whites are at the top and the Negroes are still at the bottom—a situation which they infer has been jerrymandered.

If I understand the Portuguese system correctly, advancement depends upon merit. In other words, even without any colour discrimination at all, the Negroes still fail to oust the ruling Portuguese Whites. But surely this is exactly what we should expect if the premises I have advanced are right—and I challenge anyone to disprove them on biological grounds. As I have already said, integration permanently condemns the Negroes to an inferior position in the society of which they have become part, and even if integration is enforced a caste system or horizontal form of segregation will remain because, in the context of European technological civilisation to which European minds are more attuned, the Whites will rise to the top and the Negroes, who are adjusted to a different evolution of society and have different inherent needs and responses, will remain at the bottom—except for a few exceptional persons who are able to cross the racial barrier.

For integration to succeed an entirely different kind of society would have to be created—one born equally of the Negro mind and the European mind. This would mean abandoning many ways natural to Europeans, as well as all technological progress, and reverting to a non-industrial and non-technical society. Only then could an integrated social order have any semblance of being theoretically possible.

No doubt what I have said will be strenuously resisted by those sociologists, politicians, and churchmen, who are exponents of integration, but they can only base a coherent argument on the premise that all men and all races are equal or potentially equal. If this is accepted it can be argued that the Negroes are laggard in terms of the ideals and achievements of European society solely because they have not had the opportunity for better things as their physical and social environment has been against them, but given special opportunities—a specially privileged status in society—to correct these disabilities they too will produce their Cicero, Archimedes, Pythagoras, Aristotle, Copernicus, Shakespeare, Dante, Newton, Watt, Napier, Darwin, Mendel, Fleming, Baird, Einstein and all the others necessary to the development of every aspect of a fully mature civilisation.

Considered in the light of racial history, however, this premise is manifestly absurd and unprovable. It is disproved by the thousands of breeding experiments which are taking place all the time, by twin and fosterage studies, and by intelligence tests of every kind

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

—not only literacy ones but Porteus Maze and other culture-free tests. This absurd theory, derived from the long-discredited biological school of Lamarck, would have been as dead as the dodo long ago were it not kept alive by politically orientated persons whose political philosophy depends on the destruction of any basic knowledge of the real nature of men and the races into which they are divided.

Since it is virtually self-evident that racial integration will not work—even to many of its aggressive proponents—the more extreme integrationists, including a leading Anglican churchman, are now advocating something which they all denied was their aim a few years ago: racial crossing as the solution to the problem of integration. These people still have the pre-twentieth century idea that just as, say, orange colour can be mixed with black to make brown, so racial mixture can create a coffee-coloured population. This shows their lack of any scientific knowledge, for our physical traits are borne on the same chromosomes which carry our mental and emotional qualities; and genetic segregation follows racial crossing, since a permanent cross cannot be created in this haphazard way but can only be achieved by vigorous selection involving destruction of the types not needed for reproduction. Thus a horizontally stratified society again emerges with the dominant stock still at the top and the weak one at the bottom, but infinite trouble and misery are created in the process of this genetic segregation. It seems astonishing that people cloaked in the utmost of moralising and religious humbug could wish to reduce mankind to such chaos and misery.

In Haiti and other places where a White ruling stock has been eliminated and a racially mixed population has taken control there has been no burgeoning of great, progressive nations endowed with leadership, but the racial elements are gradually segregating themselves out and the less Negroid strains are rising to power. This is true of most of Central and South America where, no matter how hybrid the populations may be, the upper classes are mainly or even entirely White. The same was also true of Cuba before Castro's régime committed genocide in attempting to eliminate the White element.

It is my opinion that the Negro peoples are being made the victims of a political philosophy—disguised as a desire to promote their welfare—which will distort their natural development, rob them of their own self-respect and of satisfaction in their own achievements and ways of life, and do them untold harm. Black racialism comparable to Nazism or any other form of racialism of the past has already been created in certain quarters. This can only incite those afflicted by it to clash with those White nations which decide there are limits to the unreasonable concessions they

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

are prepared to make to militant Black nationalism, and in such a clash the Negro peoples in certain areas might be largely destroyed.

The way of peace must be pursued if successful solutions of the racial dilemma are to be achieved. This means that interference in Africa and in America's Deep South by often well-meaning but usually profoundly ignorant and sometimes emotionally disturbed people must stop, in order that the *modus vivendi* best adjusted to each situation may be allowed to develop naturally. In South Africa and probably in Rhodesia separate development may be expected, but some kind of segregation is likely in the United States, Britain —with its already large Negro influx—and the Portuguese territories. Whatever systems are adopted should be designed to give each stock the education and way of life best suited to its needs.

The object of good government is the happiness and well-being of all men, but in large areas of Africa as well as elsewhere man has been set against man, and unhappiness, strife and anarchy have already resulted from rigid adherence to militant integrationism—with its insistence on "one man—one vote" even in contexts where that system is completely inapplicable. Incidentally, the Negro mentality prefers strong government to democratic government, and the imposition of universal franchise on Negroes merely forces them to transfer allegiance from their chiefs to political adventurers not bound by tribal law and custom who rapidly develop one-party states—as in Ghana, Sierra Leone, Tanzania, Kenya and elsewhere. Integrationism has clearly failed to achieve ends beneficial to man's happiness and well-being. Indeed forced integration is bound to fail in the end since all crazy political theories break on the rock of the nature of man—but before they do they bring tragedy to the peoples upon whom they are inflicted.

Our duty should be to see that each stock develops along natural lines consistent with man's nature of "everything after its kind." In so far as these lines of development—the only ones which can ultimately produce stable societies—may need to be adjusted and softened for the well-being of all, particularly the weaker stocks, we should see that this is done. To advocate that each stock should develop in its own milieu does not mean that we should abandon charity and love. Nevertheless, kindness and Christian concern for the well-being of our neighbours of other stocks are fast being dissipated as men are driven by the pressure of forced integration to defend their own long-cherished traditions and ideals.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

RACE AND ANTI-SOCIAL BEHAVIOR IN AMERICA: A CLOSER LOOK

By WILLIAM FLAX

In an Appendix to an earlier essay[1] we considered the varying contributions of the White and Negro populations of the United States to the whole of certain types of anti-social behavior, as measured by means of tabular projections of statistical data on commitments to prison and illegitimate births in America, compiled by race as of particular points in time, over some two or three generations. The present effort is an attempt at providing additional insight into possible causal factors responsible for some of the trends previously indicated, and should properly be read in conjunction with the previous paper. The data herein presented is subject to similar qualifications.[2]

While the earlier study dealt with both prison commitment and bastardy statistics, the present will be limited to a further projection of data on commitments to prison.

I

Tables I and II—which show Negro and White[3] State prison commitments during the period from 1904 to 1963 in South Carolina and Mississippi, the two American States which for many years have had the largest Negro populations (by percentage) of any and have remained for over a century the most rigidly segregated and unyielding examples of those racial patterns traditionally attributed to the American South—are offered for comparison with Tables IV and V in the earlier article which offered similar projections for New York and Pennsylvania, the two leading States in the least segregated, most equalitarian environmentalist-oriented, Northeastern section of the United States. The data, therefore, has been calculated in a substantially similar manner.

1 William Flax, "Environmentalism: Scientific 'Achilles Heel' of Collectivist Totalitarianism," THE MANKIND QUARTERLY, Vol. VI, No. 2, October-December 1965, pp. 86-116.

2 See *ibid.*, pp. 93-95.

3 While the per capita ratios are here calculated on the basis of Negro to non-Negro, the fact—as evidenced in the notes following the Tables—is that the non-Negro population in these States is almost entirely White, even as the non-White population of Pennsylvania (*ibid.*, Table IV) is almost entirely Negro. The ratios are therefore, in each case, comparable to the New York data (*ibid.*, Table V).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A general comparison of the four Tables reveals consistently higher annual Negro to White per capita prisoner commitment ratios in the two Northern States than in the two Southern ones, the former being always above the American average (Tables I, II and III of our former study) and the latter being almost invariably below. This corresponds to, and thus re-confirms, patterns repeatedly demonstrated in many previous expositions throughout American history.[4]

A closer inspection of these Tables and the figures for comparable dates, however, will also suggest likely explanations for the dynamic factors involved, while seeming to eliminate some of the presently popular theories which have been advanced by others:

1. The Southern Negro crime pattern is not a static quantity from which the migrating Negroes, first settling in other regions, deviate. The general (long-term) downtrend in annual Negro to White prison commitment ratios in South Carolina and Mississippi, illustrated in the Tables, attests a gradual victory over some of the more serious criminal tendencies of the Negro community earlier witnessed, apparently by a gradual conditioning of the Negro population towards traditional (White) norms.

While this result may have been aided by emigration of some of the lawless elements it seems unlikely that this could be the major cause for the trend demonstrated, not only because of the sharp drop in the Southern Negro to White ratios during periods of a significant net rise in the inclusive general ratios, but also because the periods when the greatest declines in annual Southern Negro to White per capita prison commitment ratios took place do not correspond to the periods of the greatest emigration of Negroes from those States.

These figures are certainly not consistent with any theory which holds that the lower Negro crime ratios in the South result from a long repression of the Negroes dating back to slave times. This relative Southern victory over Negro crime occurred long after the end of slavery.

2. Similarly, a comparison of Tables I and II with the aforementioned New York and Pennsylvania Tables would appear to refute any theory that the high Negro crime rate in the North is a result of the increased urbanization of the Negro or a first reaction to a "freer environment" on the part of long repressed Southern Negroes. First, it must be observed that there has been an increased urbanization of Negroes in the South in recent years, as well as generally in the United States, without appreciably altering the

[4] *Ibid.*, footnote 15, pp. 96-97.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

long-range trends. But, far more significantly, the Northern Negro to White annual per capita prison commitment ratios demonstrate no constant pattern and no clear relationship to the extent of the current or recent immigration of Negroes at any particular point in time.

For example, while the South Carolina "Major Offenders" (Table I, line 2) Negro to non-Negro annual commitment ratio, which stood at 2.47 in 1904, rose to 3.00 in 1910 (line 4) before falling to .758 in 1923 (line 6) and .722 in 1930 (line 7), and while similar Mississippi annual Negro to non-Negro prison commitment ratios (Table II) went from 5.27 in 1904 to 3.61 in 1910, 1.66 in 1923 and 2.45 in 1930, the New York Negro to White annual prison commitment ratio fell from 6.38 in 1904 to 4.98 in 1910, before rising to 6.60 in 1923, from which it fell back to 5.31 in 1930.[5] During this period the largely urban Negro percentage of the total New York population aged 15 or older more than doubled (rising during the 1920's, alone, from 2.13 to 3.42 per cent). The subsequent rise in the annual rate of Negro commitment to prison in New York, from 5.31 to approximately 12 times the White per capita commitment rate, while the equivalent ratios in South Carolina and Mississippi rose only very slightly, can be explained only in terms of the social history of New York from 1930 onward.

Equivalent data for Pennsylvania reveals the annual non-White to White per capita prison commitment ratios falling from 9.71 in 1904 to 6.64 in 1910 before rising to 8.32 in 1923 and falling again to 5.53 in 1930. At the same time, the primarily urban Negro population in the State experienced a substantially greater relative increase as a percentage of the whole, notwithstanding a very rapid growth in the White population, than it did in the epoch from 1930 to 1960.[6] Nevertheless, the non-White to White prison commitment ratios rose to levels exceeding even those of 1904, in the latter period.

3. The South Carolina figures, which show a Negro annual per capita felony commitment rate frequently falling below the White rate, although atypical even for the South, should be of especial interest to criminologists. They demonstrate the possibility of effectively controlling whatever inherent propensities may be reflected in the more usual relative level of serious criminal behavior within the Negro community. The environmental factors necessary, however, would appear to be the very ones which modern equalitarian environmentalists reject!

[5] *Ibid.*, Table V.

[6] *Ibid.*, Table IV. Pennsylvania's non-White population aged 15 and over was 120,125 in 1900, 321,692 in 1930, and 572,536 in 1960.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

II

To the reviewer, one of the most impressive revelations of the data considered in our previous study was the striking upsurge in the annual Negro to White prison commitment ratios in 1946, immediately following World War II,[7] which began to recede again the following year,[8] apparently only to approach such levels again in the 1960's. Since those who were consigned to prison in 1946 would, for the most part, have committed offences either in the latter part of 1945 or in the first part of 1946—the period of the great demobilization of the American Armed Forces, with all the vast problems involved in re-adjusting millions of young men to civilian life—the phenomena must surely have been related. A State by State comparison, therefore, seemed an interesting opportunity to test the relative effects of the attendant social upheavals on Negroes in the different sections of the United States, especially the *relative ease with which Negro returnees adjusted to segregated versus integrated environments.*

It should be noted that, although it is true a somewhat larger percentage of Southern Negroes than Northern Negroes were rejected as unqualified for military duty, the very fact that a still sizeable number of temporarily disoriented Negroes were being released into the South, as well as into the North, should have tended to level out the incidence of certain effects which normally accrue to the Northern situation because of the infinitely greater proportion of recent migrants among the "sedentary" Negro populations. For this reason a more careful examination of the period would seem to provide an empirical basis for testing some of the theories which have been proffered through the years to explain the high American Negro crime rate generally, and particularly the continuously higher Negro crime rates in the North than in the South. (These latter usually suggest in one form or another a cause for the phenomenon in the long "frustrations" of the Negro under segregation in the South incompletely dispelled in a Northern environment which has, at least, released the Negro from the continuing "repressions" which, it is held, totally suppress his "self-expression" in the South).[9] For, although the American Armed Forces were still segregated during World War II, it certainly can not be maintained that there was any rigid segregation of Northern

[7] *Ibid.*, Table III, line 8.

[8] *Ibid.*, p. 113, note (*q*) to Table III.

[9] A considerable refinement of the Gunnar Myrdal theory, which may be culled from pages 974-978 of *An American Dilemma* (Harper, New York, 1944). In addition to blaming "discrimination in justice," a physically poor environment, and the Southern prison system(!), and making the suggestion that "the white man brings his own crime, vice and disrespect for law to the Negroes"(!), Myrdal attributes the higher Negro crime rates

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

from Southern Negroes. If the "repression-frustration-explosion" theory had any merit, there should have been a tendency towards an evening of Negro crime patterns after the war, even as there must have been a partial assimilation of Negro attitudes.

What actually happened is demonstrated by Tables III, IV and V which show male felony prisoners received in State institutions in 1946, by their race, in the majority of American States, with Negro to non-Negro per capita commitment ratios calculated not on the basis of the percentage of the population which was Negro at the time of the nearest Census, as were all previous Tables in each study, but on the basis of the estimated population at the time most of the offenses being punished were actually committed. (A course necessitated by the considerable changes in many State totals during the decade from 1940 to 1950 as a result of Negro migration from one State to another). The ratios so calculated are then compared with those of 1940 to show the changing relationships between the White and Negro crime patterns.

Table III, which contains data on 26 of the 28 American States[10] with the largest (absolute) Negro populations, as well as the District of Columbia, shows a Negro to non-Negro felony commitment ratio climbing in every one of the eleven Northern and Northeastern States covered. The gains are significant in each case but one, and produce the highest ratios of all in the first four American States to adopt "F.E.P.C." laws (making it illegal to exercise personal racial or religious preferences, even in the area of private employment), New York (1945),[11] New Jersey (1945),[12] Massachusetts (1946)[13] and Connecticut (1947):[14] in fact, the only States shown on this Table which adopted such legislation in the 1940's[15]—circumstances which merely indicate the greater environmentalist bias which Americans, generally, recognize as prevailing in that section of the Union. We, surely, do not suggest that acts of legislation, not yet even passed in two of the four States, themselves contributed to the pattern projected in the Table!

Alternatively, only three of the six Border States (still relatively segregated in 1946) show any increase in the Negro to non-Negro felony commitment ratios, and only two of these manifest significant increments, while West Virginia recorded a significant

to (1) the slavery tradition and "caste situation," (2) a desire for revenge for past discrimination, (3) the social disorganization of the Negro, and (4) the intense competition between Negroes! All of these "factors" should have tended to level out in 1946, if valid at all.

[10] The two other States, Mississippi and Georgia, did not report equivalent data for the two years (1940 and 1946), although Georgia did report such data for the period from 1st April 1946 to 31st March 1947 indicating felony commitments of 1062 Whites and 1710 Negroes, which in a population, aged 15 or over, 29.92 per cent Negro produced a Negro to non-Negro per capita commitment ratio of 3.77

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

decrease in such ratio. Of the nine Southern States represented, only four showed increases of which two proved significant, while such ratios declined significantly in Arkansas, Louisiana, South Carolina and Tennessee.

Table IV, which contains composite projections of the State totals offered in Table III divided into regions, clearly illustrates the diverging pattern suggested by the above commentary, although such composites are always subject to the qualification that they tend to over-weight the data from those States with the greatest number of imprisoned felons per head of population, whereas that phenomenon does not necessarily reflect a more serious crime pattern meriting greater weight.[16]

Table V presents data, similar to that projected in Table III, for five additional States whose male populations were over 1 per cent Negro in 1950 but still contained less than 17,500 Negroes of

[11] *New York Executive Law,* Sections 290 to 301.

[12] *New Jersey Statutes Annotated,* Title 18, Chapter 25.

[13] *Massachusetts Laws 1946,* Chapter 368.

[14] *Connecticut Laws 1947,* Chapter 171.

[15] The next State represented in the Table to do so was Pennsylvania in 1955.

[16] What constitutes a felony varies from State to State, as do policies of committing or suspending sentences, and the treatment of those under 18. There are also the usual problems of apprehending, charging and convicting, so that only a fairly small sampling of even some of the most serious crimes committed in any State are apt to be punished by confinement in the State prison system. (This is the primary reason, to be perfectly candid, why both this paper and the previous one have treated the phenomena of White and Negro crime rates in comparison with one another at different points in time in the same jurisdiction or jurisdictions—and only compared the resulting ratios with those from other jurisdictions—rather than as measured in terms of number of commitments per so many thousand inhabitants).

For example, to take just one crime, larceny, the U.S. Federal Bureau of Investigation, *Uniform Crime Reports, 1964,* "Crime in the United States," estimates that there were 704,500 larcenies of $50 or more in the United States in 1964 (out of a probable total of close to 2,500,000 larcenies of all amounts). In some States a larceny of $50 or more constitutes a felony, but in the reviewer's own State of Ohio the minimum value of the property which must be taken, in order to constitute a felony rather than a misdemeanor, was raised some years ago from $35 to $60, thereafter consigning many to the county jails who would formerly have gone as felons to the State Penitentiary.

Figures provided in the same F.B.I. booklet show that in only about 6.1 per cent of the 1964 larceny cases was someone actually convicted of the degree of larceny reported. The 1962 edition of the same report evinces a 7.2 per cent rate of conviction—only two years earlier, at a time when 539,893 larcenies of $50 or more were estimated. If even the unhappy 1962 conviction rate had still prevailed in 1964 another 27,000 persons would have been found guilty of larceny—whether felonious or not depending on State law, and whether they were imprisoned or not depending on a combination of law, policy and personal discretion, but a hypo-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

all ages; populations not quite large enough to warrant their inclusion in Table III. (By way of a comparison, the State with the smallest number of male Negroes in 1950 represented in Table III was Delaware with approximately 22,000).

In view of our observation in reference to Table III as to the four States therein represented which had enacted "F.E.P.C." laws during the 1940's as a possible measure of the environmentalist climate prevailing therein, we should point out that such legislation was also enacted in three of the States included in Table V, New Mexico, Rhode Island and Washington, in 1949;[17] that is, four years after New York and New Jersey, and two and three years, respectively, after Connecticut and Massachusetts.

The pattern reflected here is not so clear as that in Table III, especially considering the high Negro to White per capita prison commitment ratio in Nebraska, which by our suggested gauge may appear somewhat less "environmentalistic" in the outlook of its people than New Mexico, Rhode Island or Washington. But it must be remembered that this type of legislation is only one of the usual symptoms of the extent of such influences in the United States, and is surely no infallible guide.[18]

One truly salient comparison, nevertheless, is that naturally arising between Arizona and New Mexico. These two geographically contiguous States on the border of Mexico have not only very similar histories and populations but great similarity in their social, geographical and climatic conditions as well. They were even admitted to the Union in the same year, 1912, both allowing their respective School Boards the authority to maintain separate schools for Whites and Negroes at their own discretion. That New Mexico by 1946 had become far more "environmentalistic" than Arizona, however, is certainly suggested by the fact that it was possible only three years later to enact an "F.E.P.C." law in the former.

Geographically, Arizona is next to California, where the Negro

thetical felony conviction of 7000 of this added total, coupled with a hypothetical series of decisions to jail the lot of this increment, would have resulted in an increase in the number sent to prison in 1964 over 10 per cent as great as the total of all felons sent to prison in 1960!

How changes in these various combinations of factors do, *actually*, affect the over-all rates of commitment to prison per head of population is illustrated by the comparatively small increase in the number in fact sent to prison in 1960 over those so consigned in 1940 (Table III of the 1965 study, lines 7a and 10). Nevertheless, F.B.I. data shows that the number of serious crimes reported increased by almost 150 per cent during the 20-year period (*Uniform Crime Reports, 1959* and *1960*).

[17] *New Mexico Laws, 1949*, Chapter 161; *Rhode Island Laws, 1949*, Chapter 2181; and *Washington Laws, 1949*, Chapter 183.

[18] And the Nebraska Legislature (Res. No. 25) did provide for an investigation as to laws necessary to prevent discrimination in employment, in 1949.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

crime rate was very high, while New Mexico borders Texas, where the Negro crime rate was relatively low, yet it is the Arizona "environment" which succeeded in holding down the Negro crime rate during this period, while New Mexico displayed the greatest increase in the Negro to White annual prison commitment ratio from 1940 to 1946 of any of the 31 States[19] under review, and indeed the highest ratio of all at the end of that period.

Thus we see two of the five States in Table V confirming the pattern of extreme divergence obtained by contrasting the most "environmentalistic" (Northeastern) States with the least "environmentalistic" (Southern) States in Tables III and IV, while the other three but fit the common pattern manifested by the Northern States generally.

III

Studies of the relative rates by which the Negroes and Whites are committed to prison in the United States, and in various States, at various times, may be summarized as follows:

1. At all times surveyed, the differences between White and Negro standards of behavior, as reflected in per capita statistics on commitment to prison, were greater in the North than in the South.

2. These differences were most accentuated in comparisons of those States most "environmentalistic" with those States least "environmentalistic."

3. With the increasing general emphasis on equalizing racial circumstances, integrating populations, and attributing human deficiencies and delinquencies to faulty "environment" rather than human culpability, during the past generation the differences between the relative Negro and White rates of commitment have widened very considerably.

4. This increase in the differences between the relative Negro and White prison commitment rates, in times of such rising emphases on "environmentalistic" programs, projects and explanations, is greatest in those States most completely oriented to the general trend, and least in those States which most completely reject it.

5. While the long-standing differences between Negro to White crime ratios in the North and Negro to White crime ratios in the South may be (in part) a result of the more migratory, newly settled situation of large segments of the Northern Negro popula-

[19] Or, obviously, of Georgia either (see footnote 11).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tion, the great increases in these differences during the past generation can not be attributed merely to such causes.

6. A two-generation survey of relative White and Negro prison commitment rates in South Carolina indicates that means can be devised to control the incidence of the patterns evident elsewhere. *The present Negro crime rates, and the concomitant suffering of the Negro people, are not inevitable.*

7. A survey of crime patterns in the period immediately following World War II, when all the American States had common problems of re-adjusting their soldiers returning from the war to civilian life, reveals no exception to a pattern under which no Southern State suffered a Negro to White prison commitment ratio even nearly equal to, much less in excess of, the composite of such ratios in the North or Northeast; while no Northern or Northeastern State achieved a Negro to White commitment ratio nearly as low as the Southern composite.

8. Only one of the 14 Northern States surveyed achieved a similar ratio as low as the highest of the 10 Southern States surveyed.

9. The results in some of the Border States under-lapped those in certain of the individual Southern States, although not the Southern composite, and in others the results over-lapped those in various Northern States, as well as the Northern composite.

The foregoing must be considered in the light of these additional phenomena:

1. The annual incidence of major crime in the United States is now over three times what it was in 1940.

2. The rate of major crimes per unit of population is now about 2½ times as great as it was in 1940.[20]

3. The overwhelming majority of the victims of Negro crimes of violence are other Negroes, who must be accounted the greatest sufferers from the current lawlessness.

4. Our previous study demonstrated an approximate doubling of Negro illegitimacy rates since 1930 and a proportionate increase in the rate of illegitimacy among Whites even greater than among Negroes since 1950, with some evidence, at least among Whites, of a relationship between that increase and the extent of forced interracial congregation.

[20] Estimated from data found in the U.S. Federal Bureau of Investigation, *Uniform Crime Reports, 1959*, p. 3, and *Uniform Crime Reports, 1964*, p. 4.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The mixed application of environmentalist principles and programs in America, as well as excuses for misconduct, which assume a plasticity of human characteristics never demonstrated, has adversely affected American society by greatly increasing the incidence of anti-social behavior among the American population, often in direct relationship to the extent each segment (White or Negro, Northern or Southern) is afflicted by such application, and indeed in proportion to the extent of the community-wide acceptance of such application. It seems obvious that the one sort of *environment* which does tend to induce conformity to the long-established social norms—that is the *one* type of "environmental" approach that actually succeeds—is that which holds the *individual*, and not his *environment*, responsible for his own personal conduct.

In assuming a culturally controlled plasticity of the human type, which apparently does not exist, American environmentalists are rapidly destroying the genuine *cultural* gains of many centuries. The saddest victim of their deception has been the American Negro.

[*Tables follow*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE I

SOUTH CAROLINA STATE PRISON STATISTICS, 1904-1960, BY RACE

	Description	Year	White	Negro	Other	Per Cent Negro	Per Cent of Population 15 or over Negro	Ratio of Negro Prisoners per Capita to Non-Negroes
1.	Penitentiary Population[a]	1904	106	554	0	83.94	56.04[b]	4.10
2.	"Major Offenders" Committed[c]	1904	55	173	0	75.88	56.04[b]	2.47
3.	Penitentiary Population[d]	1910	166	682	0	80.42	53.03[e]	3.64
4.	Committed to Penitentiary[c]	1910	53	183	1	77.22	53.03[e]	3.00
5.	Penitentiary Population[d]	1923	244	284	0	53.79	49.73[f]	1.18
6.	Committed to Penitentiary*	1923	84	63	0	42.86	49.73[f]	.758
7.	Received in Penitentiary[c]	1930	352	200	2	36.10	43.92[g]	.722
8.	Received in Penitentiary[ch]	1934	277	370	0	57.19[h]	43.92[g]	1.71
9.	Male Felony Prisoners Received[c]	1939	359	292	0	44.85	39.22[i]	1.26
10.	Penitentiary Population	1940	848	1339[j]	—	61.23[j]	40.28[jk]	2.34[j]
11.	Male Felony Prisoners Received[c]	1940	302	255	1	45.70	39.22[i]	1.30
12.	Felony Prisoners Received[c]	1946	289	166	0	36.48	35.27[lm]	1.05[m]
13.	Felony Prisoners Received[c]	1950	420	183	0	30.35	35.27[l]	.800
14.	Felony Prisoners[n]	1960	1152	925[j]	—	44.54[j]	30.72[jo]	1.81[j]
15.	Felony Prisoners Received[c]	1960	640	253[j]	—	28.33[j]	30.72[jo]	.892[j]

* During first six months of year only.

TABLE II

MISSISSIPPI STATE PRISON STATISTICS, 1904-1963, BY RACE

	Description	Year	White	Negro	Other	Per Cent Negro	Per Cent of Population 15 or over Negro	Ratio of Negro Prisoners per Capita to Non-Negroes
1.	Penitentiary Population[a]	1904	87	961	1	91.61	57.74[b]	7.99
2.	"Major Offenders" Committed[c]	1904	45	324	0	87.80	57.74[b]	5.27
3.	Penitentiary Population[d]	1910	154	1536	0	90.89	55.89[e]	7.87
4.	Committed to Penitentiary[c]	1910	111	512	1	82.05	55.89[e]	3.61
5.	Penitentiary Population[d]	1923	298	1320	1	81.53	52.31[f]	4.03
6.	Committed to Penitentiary*	1923	88	160	0	64.52	52.31[f]	1.66
7.	Received in Penitentiary[c]	1930	288	703	0	70.94	49.95[g]	2.45
8.	Male Felony Prisoners Received[c]	1939	226	592	1	72.28	46.87[h]	2.96
9.	Penitentiary Population	1940	701	2081[ij]	—	74.80[i]	47.76[ij]	3.25[i]
10.	Felony Prisoners Received[c]	1950	222	530	1	70.39	42.07[k]	3.27
11.	Felony Prisoners[l]	1960	612	1363[i]	—	69.01[i]	37.49[im]	3.71[i]
12.	Felony Prisoners Received[c]	1960	330	524[i]	—	61.36[i]	37.49[im]	2.65[i]
13.	Penitentiary Population[a]	1963	749	1505[i]	—	66.77[i]	37.49[im]	3.35[i]
14.	Penitentiary Population[a]	1965	728	1335[i]	—	64.71[i]	.....	.....

* During first six months of year only.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE III

MALE FELONY PRISONERS RECEIVED FROM COURTS IN STATE INSTITUTIONS IN TWENTY-SIX* STATES IN 1946, BY RACE, WITH NEGRO TO NON-NEGRO PER CAPITA RATIOS COMPARED TO 1940

	State	White	Negro	Other	Per Cent Negro	Estimated Per Cent of Population 15 or over Negro[a]	Ratio of Negroes to Non-Negroes[b]	Ratio in 1940	Change
1.	Alabama	399	722	—	64.41	30.85	4.06	3.67	+ .38[c]
2.	Arkansas	284	236	2	45.21	22.24	2.89	3.54	— .66[c]
3.	California	1666	498	51	22.48	3.00	9.38	5.05	+4.33
4.	Connecticut	270	63	—	18.92	2.14	10.66	7.52	+3.14
5.	Delaware	45	64	—	58.72	13.55	9.07	7.01	+2.06
6.	District of Columbia	126	350	—	73.53	29.69	6.58	7.29	— .71
7.	Florida	645	506	—	43.96	23.28	2.59	2.70	— .12[c]
8.	Illinois	1007	614	—	37.88	5.84	9.84	7.43	+2.41
9.	Indiana	849	218	—	20.43	3.94	6.26	5.02	+1.24
10.	Kansas	297	81	1	21.37	3.72	7.03	4.90	+2.13
11.	Kentucky	775	275	—	26.19	7.61	4.31	4.38	— .08[c]

12.	Louisiana	370	488	—	56.88	31.98	2.81	3.82	−1.01
13.	Maryland	854	1456	1	63.00	15.86	9.03	8.72	+ .32[c]
14.	Massachusetts	495	76	1	13.29	1.41	10.68	5.86	+4.81[c]
15.	Michigan	1753	764	21	30.10	5.46	7.45	7.28	+ .17
16.	Missouri	732	275	—	27.31	6.80	5.15	4.54	+ .60[c]
17.	New Jersey	733	481	—	39.62	5.63	11.00	8.34	+2.66
18.	New York	1542	936	15	37.55	4.74	12.08	8.50	+3.57[c]
19.	North Carolina	481	568	24	52.94	24.69	3.43	3.37	+ .06
20.	Ohio	1372	774	1	36.05	5.61	9.49	6.54	+2.94[c]
21.	Oklahoma	654	207	44	22.87	6.46	4.29	4.65	− .35[c]
22.	Pennsylvania[d]	715	409	2	36.32	5.17	10.46	7.83	+2.63
23.	South Carolina	269	138	—	33.91	36.695	.885	1.304	− .419
24.	Tennessee	530	273	—	34.00	16.57	2.59	3.26	− .67
25.	Texas	1420	730	1	33.94	12.83	3.49	3.22	+ .27
26.	Virginia	519	936	—	64.33	22.25	6.30	4.27	+2.03
27.	West Virginia	425	95	—	18.27	6.22	3.37	4.05	− .69[c]

[*] The twenty-six American States with the largest Negro populations at the time for which such data was available, and the District of Columbia.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE IV

REGIONAL COMPOSITES OF THE DATA IN TABLE III

	Region	White	Negro	Other	Per Cent Negro	Estimated Per Cent of Population 15 or over Negro	Ratio of Negroes to Non-Negroes	Ratio in 1940	Change
1.	South[a]	4917	4597	27	48.18	22.26	3.25	3.31	— .06
2.	Border[b]	3611	2722	45	42.68	9.61	7.00	5.53	+1.47
3.	North[c]	6944	2949	74	29.59	4.74	8.45	6.18	+2.28
4.	North-east[d]	3755	1965	18	34.25	4.42	11.25	8.37	+2.88
5.	Twenty-six States[e]	19227	12233	164	38.68	9.37	6.10	5.22	+ .88

TABLE V

MALE FELONY PRISONERS RECEIVED FROM COURTS IN STATE INSTITUTIONS IN FIVE STATES IN 1946, BY RACE, WITH NEGRO TO NON-NEGRO PER CAPITA RATIOS COMPARED TO 1940

	State	White	Negro	Other	Per Cent Negro	Estimated Per Cent of Population 15 or over Negro*	Ratio of Negroes to Non-Negroes*	Ratio in 1940	Change
1.	Arizona	363	55	14	12.73	3.77	3.72	3.59	+ .14*
2.	Nebraska	401	52	20	10.99	1.27	9.59	6.98	+2.61
3.	New Mexico	279	43	15	12.76	1.19	12.13	4.58	+7.56
4.	Rhode Island	125	17	—	11.97	1.56	8.58	4.35	+4.23
5.	Washington	667	65	16	8.69	1.01	9.29	7.58	+1.71

* See the notes to Table III.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

NOTES AND SOURCES TO TABLES

TABLE I

(*a*) As of 30th June.
(*b*) 1900 Census. (The total non-White population was 56.06 per cent).
(*c*) During the calendar year.
(*d*) As of 1st January.
(*e*) 1910 Census. (The total non-White population was 53.06 per cent).
(*f*) 1920 Census. (The total non-White population was 49.76 per cent).
(*g*) 1930 Census. (The total non-White population was 43.97 per cent).
(*h*) 1934 proved the peak year for Negro crime in South Carolina during the 1926-1946 period. The percentages of penitentiary commitments which were Negro had been 46.36 in 1926, 38.63 in 1929, 36.10 in 1930 (line 7), 47.74 in 1931 and 51.79 in 1933. In 1935 the percentage was 56.07, and in 1936 it fell back to 50.00 per cent and continued to decline thereafter.
(*i*) 1940 Census, male population only. (The total non-White male population was 39.29 per cent).
(*j*) Includes other non-Whites with Negroes.
(*k*) 1940 Census. (Negro, only, population was 40.21 per cent).
(*l*) 1950 Census. (The total non-White population was 35.34 per cent).
(*m*) In order to keep the Tables in this series comparable we have continued our usual practice here of using the exact population figures from the closest Census year. Because of the sharp decline in the Negro percentage of the South Carolina population, aged 15 or over, between 1940 and 1950, these figures, undoubtedly, markedly understate the Negro percentage of population in 1946, and consequently overstate the Negro to non-Negro prisoner ratio. (A less extreme effect in the opposite direction, *i.e.*, an overstatement of the Negro population and an understatement of the ratios, could be expected for lines 2, 6 and 8).
(*n*) As of 31st December.
(*o*) 1960 Census. (99.73 per cent of the total non-White population of all ages were Negroes).

Sources: U.S. Department of Commerce and Labor, Bureau of The Census, *Prisoners and Juvenile Delinquents in Institutions, 1904,* Washington, 1907; U.S. Department of Commerce, Bureau of The Census, *Prisoners and Juvenile Delinquents in The United States, 1910,* Washington, 1918; *Prisoners, 1923,* Washington, 1926; *Prisoners, 1926; Prisoners, 1929 and 1930; Prisoners, 1931; Prisoners, 1933; Prisoners, 1934; Prisoners, 1935; Prisoners, 1936; Prisoners, 1939; Prisoners, 1940; Prisoners, 1946; Sixteenth Census of The United States, 1940,* "Special Report on Institutional Population 14 Years Old and Over;" U.S. Department of Justice, Federal Bureau of Prisons, *National Prisoner Statistics, 1950,* Leavenworth, Kansas, 1954; National Prisoner Statistics, "Characteristics of State Prisoners, 1960;" U.S. Department of Commerce, Bureau of The Census, *Fifteenth Decennial Census, 1930,* Vol. II, "General Report;" *Sixteenth Census of The United States, 1940,* Vol. II, Part 6, "Characteristics of the Population;" *1960 Census of Population,* Vol. I, Part 42, "Characteristics of the Population: South Carolina."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE II

(*a*) As of 30th June.
(*b*) 1900 Census. (The total non-White population was 57.90 per cent).
(*c*) During year.
(*d*) As of 1st January.
(*e*) 1910 Census. (The total non-White population was 55.98 per cent).
(*f*) 1920 Census. (The total non-White population was 52.40 per cent).
(*g*) 1930 Census. (The total non-White population was 50.11 per cent).
(*h*) 1940 Census, male only. (The total non-White population was 47.01 per cent).
(*i*) Includes all non-Whites.
(*j*) 1940 Census. (Negro, only, population was 47.64 per cent).
(*k*) 1950 Census. (The total non-White population was 42.21 per cent).
(*l*) As of 31st December.
(*m*) 1960 Census. (Negroes comprised 99.47 per cent of the total non-White population of all ages).

Sources: The same as for Table I, wherever applicable, with the following additions: U.S. Department of Commerce, Bureau of The Census, *Sixteenth Census of The United States, 1940,* Vol. II, Part 4; *1960 Census of Population,* Vol. I, Part 26, "Characteristics of the Population: Mississippi;" Letter from Superintendent, Mississippi State Penitentiary, 11th January 1966.

TABLE III

(*a*) These figures were calculated by averaging the exact percentage of each State's population aged 15 or over who were counted as Negroes on the 1940 Census with the percentage calculated by the author as being Negro in 1950 from the various data available in the official Census reports of that year.
(*b*) Per capita rates of commitment.
(*c*) All of the figures in Table III were calculated to at least one additional decimal place than here shown, and then rounded off. Thus, some of the figures in the last column may appear to be deceptive.
(*d*) The Pennsylvania figures are for the period from 1st June 1946 to 31st May 1947.

Sources: U.S. Department of Commerce, Bureau of The Census, *Prisoners, 1940; Prisoners, 1946; Sixteenth Census of The United States, 1940,* Vol. II, Parts 1-7, "Characteristics of the Population;" *1950 Census of Population,* Vol. II, Parts 2-48.

TABLE IV

(*a*) Nine States: Alabama, Arkansas, Florida, Louisiana, North Carolina, South Carolina, Tennessee, Texas and Virginia.
(*b*) Six States: Delaware, Kentucky, Maryland, Missouri, Oklahoma, West Virginia, and the District of Columbia.
(*c*) Six States: California, Illinois, Indiana, Kansas, Michigan and Ohio.
(*d*) Five States: Connecticut, Massachusetts, New Jersey, New York and Pennsylvania.
(*e*) And the District of Columbia.

TABLE V

Sources: The same as for Table III.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SIGNIFICANT EVIDENCE ON INHERITANCE AND HYBRIDISATION

By G. PANTEL

PART I

The potentialities for the development of structural characters under environmental influence are biologically inherited, the characters taking their form, size, shape or structural and quantitative value acording to the maximum possible amount of ability to survive they may embody, which is now determinable in living ability units.[1]

THE DNA MOLECULE AND THE IDENTITY OF GENES

There is convincing sound evidence that these potentialities, the primary genetic material (our heritage), consist in deoxyribonucleic acid (DNA) molecules (or RNA, as in small viruses), the principal properties of each of which are as follows:

1. The replication or self-reproduction of the molecule, using available cellular material, once during each non-reductive cell division.

2. The specificity of reaction, interaction and biological activity of the DNA molecule.

3. The high degree of structural and functional permanence of the molecule, resulting from the constancy of its replication and from its stability, under environmental influences varying within the usual range, the structure of the molecule allowing but a stable isomeric rearrangement, a mutation, involving a reorganisation of one or more of its constituent nucleotide pairs, while otherwise the mutational change may be wholly or partially random, directed or adaptive. The mutational change depends for both its direction and its frequency of occurrence on the original isomeric arrangement of the molecule and on the degree and frequency of approximation of the ratio (K_c/E_c) of mutational liability—maximally conducive to a particular mutation—of the cellular (molecular kinetic and electrical) X-energyquanta values[2] which prevail, or are in transition, per second involving and affecting the molecule.

[1] G. Pantel, 1958, *Living Ability: Quantitative Measurement*, The Triangle, London; and G. Pantel, 1964, "Determinant Selective Tendency Based on the Quantitative Unit of Measurement for Genetical Progress in Man," *Genus*, Vol. XX, No. 14, pp. 64-77.

[2] G. Pantel, 1948, *X-Energy Forms*, European International Association, Hamburg.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The isomeric molecular arrangement of any DNA molecule can be expected to be a specific one. That of some DNA molecules can also be expected to be optimally prone to a specific mutational change accounting for a particular cell differentiation when the molecule resides in an undifferentiated tissue (gonad, gamete, zygote, early stage embryo) and not so prone after it has undergone such a change. A mutational change taking place in embryonic development and accounting for the control of a particular cell differentiation is, of course, directed chiefly by the original (undifferentiated) isomeric arrangement of the molecule, the change thus being essentially predetermined by the original molecular arrangement.

It is in accordance with this relationship, with regard to direction and incidence of the mutational change, that we experience a frequent rearrangement of the replicate of a DNA molecule, as required in embryonic development to enable the molecule to control a particular cell differentiation, on the one hand, while on the other hand we find that random spontaneous mutations are rare, and "adaptive" ones even more so.

Apart from its dependence on the isomeric arrangement of the DNA molecule, a particular kind of mutation, whether germinal or somatic, random, adaptive, or directed, such as the kind taking place in embryonic development and accounting for the control of a particular cell differentiation, is as rare as the degree and frequency of approximation of the above-described ratio of mutational liability, maximally conducive to its occurrence, is low, and vice versa.

The degree and frequency of approximation of the ratio of mutational liability—least or most conducive to a particular mutation—of the cellular (molecular kinetic and electrical) X-energyquanta values prevailing, or in transition, per second and involving and affecting the molecule has been found to depend on the developmental and physiological competence or inadequacy of the organism, on cellular structure and functional cellular mechanisms, on specifically reactive substances, on the proliferation rate of the tissue concerned and similar factors, and on environmental influences such as ionising radiation, temperature or mutogenic substances and other such agents.

On the direct and indirect evidence available, the chain molecule of DNA can be understood to be the genetic determinant of heritable characters; namely, the unit that is usually called a gene. The essential properties of a gene are those of a DNA molecule. However, is it tenable that a single DNA molecule, an individual gene, is the unit hereditary factor which controls the development of a unit character?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There is some considerable evidence (T. H. Morgan and others) to indicate that each gene constantly occupies a locus on one of the chromosomes, namely a definite point, a segment, of one of the rod-, J- or V-shaped microscopic structures arising from the nuclear network and seen during the process of cell division.

However, this evidence does not indicate that an individual gene occupies a definite locus on a chromosome, but rather that a group of genes (of DNA molecules), that interact to determine the development of one or other member of any pair of contrasted characters, are located together, occupying one definite point, one locus, on one or other member of a homologous pair of chromosomes. An attempt will be made to show this here in clear terms.

Let us recall some basic genetic facts with regard to which there is a fair measure of general agreement. The process of meiosis and fertilisation allows no deviation from the fact that the sexually conceived individual gets one set of chromosomes from the father and one from the mother. In sexual reproduction a reduction division of a maturing germ cell produces two gametes (two ova or two spermatozoa) each of which gets one half (in man, 23) of the double set of chromosomes (otherwise present in every cell of a diploid organism)—the half set of chromosomes containing one single though complete (haploid) set of hereditary factors, the genome. When the nucleus of the male gamete fuses with that of the female one to produce the zygote, the latter individual gets one paternal set of, say, 23 chromosomes and one maternal such set; it thereby becomes a diploid cell with 23 pairs of homologous chromosomes, in each member of which a large (possibly estimable) number of members of homologous pairs of hereditary factors are situated, the members of each of the pairs of homologous hereditary factors being either the same (homozygous) pair of factors, each determining the development of the same character (say of tallness), or a pair of different (heterozygous) factors, each determining the development of one of two contrasted characters (one, say, of tallness and the other of dwarfishness).

Now, the genetic hereditary units, the genes, which are the DNA molecules, are generally identified with the hereditary factors. The principles or laws concerning the transmission of the hereditary factors from one generation to the next are usually stated as concerning the transmission of the hereditary units, the genes, in the following terms: genes of the same pair segregate so that, when a germ cell undergoes a reductive division, a gamete gets either the paternal or the maternal gene of any homologous pair; genes of different pairs segregate independently of one another, unless they are located on the same chromosome, in which case they are not segregating independently as they are chromosome-linked, any

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

degree of independent segregation possible depending mainly on the frequency with which chromosome breakage, rejoining and crossing over occurs and on the relative distances apart of the genes concerned on the chromosome, and so on their relative chance to cross over.

The unfortunate mistake here is that the hereditary factors have been identified with individual genes.

Perhaps it should first be realised that we are quite right in viewing a living organism as a mosaic of unit characters, as Mendel did. The unit characters are not just conveniently picked by the cross-breeding experimenter, they are characters (such as the red or white colour of flowers or the brown or blue colour of eyes) chosen in more or less sharply contrasted pairs, which are known to be transmitted unchanged from generation to generation marking clearly the varieties of plant or animal to be crossed, the latter being well known to breed true. Therefore a character is in itself an entity, and a unit entity at that, solely because it is heritable as a unit characteristic on account of the everyday experience made with its transmission. We are, therefore, justified in looking for a hereditary factor, which again is a unit hereditary factor solely because it is responsible for the development of a particular unit character. What, then, is a hereditary factor if it is not a gene? According to the evidence referred to earlier, a gene is a DNA molecule and is for this if for no other reason a hereditary unit; but it is not the hereditary factor for which we are looking.

From work carried out by several researchers including Demerec (1959) on bacterial viruses, bacteria and other micro-organisms, as well as on fruit-flies and mice, it has been claimed that certain unit hereditary determinants, certain "mutational sites," within a gene, or rather within a gene locus, can be identified by recombination; that is, as and when they can be separated by a crossing over, which is an extremely rare event. Such a unit hereditary determinant or mutational site within a gene locus is thought to be the smallest portion of genetic material that can be separated by a crossing over.

There is a tendency to relate these observatons to the structure of the DNA molecule as understood by Watson and Crick, namely, in the sense that one or a few nucleotide pairs constituent of the DNA molecule may represent one such mutational site or unit hereditary determinant within a gene locus. The separation and recombination of nucleotide pairs by crossing over is possible and may well occur; however, these observations are capable of a different interpretation.

There is evidence indicative of the fact that the DNA molecule has not one but multiple effects on the development of many and various characters especially in lower organisms. Although the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

precise primary developmental effects of any gene locus—perhaps decisive for early as well as later developmental events—are not known, it has been found that in higher organisms a mutation in a single gene locus produces multiple effects in many parts of the body, in parts that are scarcely related to one another developmentally.

On consideration of known relevant facts and of calculations bearing hereupon, however, it is apparent that a single gene locus may be occupied by more than one DNA molecule; that is, by a group of a few DNA molecules interacting to produce a unit character. The leading and decisive recognition here is that the developmental effects of individual DNA molecules (of individual genes) do complement, supplement and modify one another so that the development of a character is but the result of their interaction. This is a basic genetic mechanism which can be expected to be fundamentally the same in all living organisms.

Consequently, the evidence of mutational sites or genetic subunits being identifiable within a gene locus by occasional crossing over and recombination (which ultimately is but evidence with exclusive reference to the gene locus as a unit of function, as a unit of a particular developmental control activity, and not as a particulate unit of genetic material) can be taken to indicate that the gene locus is the chromosomal segment in which a group of a few specifically interacting DNA molecules are located. Perhaps it is not irrelevant in this connection that the DNA molecules are the proven particulate genetic units, while there is no certainty about the actual length of the chain of any DNA molecule of whatever DNA origin.

The DNA molecules that belong to such a group sharing the same locus, of course, can be expected not to cross over and recombine singly as a rule, although they may on an extremely rare occasion do so, as is implied by the same evidence. Again from the same evidence—on which it is claimed that almost every gene locus is composed of a number of mutational sites—it can be taken that an occasional gene locus may be occupied by a single DNA molecule, while as a rule loci are occupied by more than one molecule.

Further, a number of observations point clearly to the fact that many characters, such as height or skin pigmentation, are determined by a number of non-homologous "genes" that are complementarily interacting, and it is evident that especially in higher organisms the development of a unit character is determined by the interaction of a number of "genes," which involves the interaction of a number of DNA molecules.

A wide range of varying modes of gene interaction is possible. The genes involved may complementarily enhance or modify or

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

quantitatively reinforce or reduce one another's effect. However, there is no evidence to indicate any particular mode of interaction operating in the determination of any given character. The conception of additive small effects as well as the distinction between quantitative and non-quantitative characters is, therefore, but a logical exercise entirely unsupported by evidence.

Accordingly, the *unit hereditary factor* can only be identified with the *unit gene interaction* that determines the development of a unit character. However, the group of DNA molecules (of genes), which are linked together in genetic transmission, occupy one and the same locus on a chromosome, and as a rule—without excluding complementary or modifying effects of other genes—*essentially determine* the development of a unit character by their interaction, *essentially represent* the unit hereditary factor responsible for the development of the unit character concerned.

The gene has not only been constantly identified with a unit hereditary factor, but also understood to be the entity that (*a*) undergoes mutational (discontinuous) change; (*b*) reproduces itself; and (*c*) shows a highly specific reactivity. We know now that these three are properties of the DNA molecule; no other compound is known to possess all these three properties. While a gene has these three properties and can be identified with a DNA molecule, the function of a unit hereditary factor, determining the development of a unit character, can no longer be ascribed to it, as it is apparent that it is the property of an interacting gene group unit. The term "gene," therefore, can only be used to denote exclusively the particulate genetic unit which is the DNA molecule.

A gene is changed by mutation, while the interacting gene group unit (and the unit gene interaction) determining the development of a unit character is not changed by a mutation but by the varied effect of one or more of the genes belonging to it that have undergone a mutation. The interacting gene group unit (and its unit gene interaction)—and not the gene—segregates, the paternal and maternal interacting gene group units being distributed much at random to each of the two gametes produced by a reduction division, being recombined at fertilisation, and retaining their identity in further hereditary transmission.

Without the effect of a particulate genetic unit (of a DNA molecule, of a gene) as well as that of an interacting gene group unit (of an allele) to a lesser or greater extent complementing, supplementing, modifying or leading the developmental effect of one or more other such units, the developmental part of the life process can neither be explained nor maintained. The fact that the unit gene interaction is the unit hereditary factor controlling the development of a unit character appears to be of fundamental significance. The primary activity ultimately maintaining the life

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

process as such is most likely to be a unit interaction of DNA molecules.

SEGREGATION OF INTERACTING GENE GROUP UNITS

It is the hereditary factors, namely the groups or sets of interacting genes (of interacting DNA molecules), that segregate so that a gamete gets either the paternal or the maternal set of any homologous pair of such interacting gene sets. And the relevant evidence referred to at the beginning of the preceding section indicates that the genes interacting to determine the development of a particular character, the interacting gene group unit, are grouped spatially together and occupy one definite locus on a chromosome.

How do these observations compare with Mendel's conclusions?

Mendel (at whose time the terms "gene" and "chromosome" were not conceived) emphasised that each gamete carries only one of a pair of contrasting *factors* (each producing one of a pair of contrasted characters, such as "tall" or "dwarf"); the individual gamete gets either the maternal or the paternal *factor* (not gene), either, say, the *factor* responsible for tallness or that for dwarfishness; the *factor* thus segregates, always retaining its identity, however many times it may be associated with a different allelomorphic factor in one cell over successive generations.

In the preceding section, the unit hereditary factor or unit heritable potentiality for the development of a unit character has been identified with the unit gene interaction, as a rule inherent essentially in a group of genes definitely located on a chromosome as a unit and interacting and segregating as a unit, in developmental activity and hereditary transmission. This leaves the validity of the statement of Mendel, often called "Mendel's first law" or "the law of segregation," entirely unaffected.

Numerous repeats of Mendel's experiments confirmed this conclusion. Perhaps it should be emphasised here that any normal adult can be expected to have become more or less aware of the fact of inheritance, of the permanence of hereditary material, as well as of the fact that distinguishing characteristics tend to segregate. The unfailing likeness of John to one or other of his grandparents in one or other of his characters is commonplace. Indeed, who would deny these facts?

At the same time, however, it is equally unbecoming to doubt blending in inheritance.

BLENDING IN INHERITANCE

When true breeding varieties, each homozygous for one of a pair of contrasted characters, are crossed, the F_1 generation hetero-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

zygotes may be either intermediate between the two homozygous types crossed (blending) or scarcely distinguishable from one or other of them (dominance). When the latter is the case, one of the pair of contrasted characters masks the other completely, or apparently completely, while the hereditary factors (the potentialities) for the development of both are present in each heterozygote. Mendel called the masking character dominant and the masked one recessive. He appears to have understood that the recessive factor remains latent, completely inactive, showing no sign of its presence in the heterozygote; showing up only when it happens to appear in a later generation in the homozygous state.

The complete latency of any recessive factor is not a tenable principle. Dominance also appears to be restricted to particular pairs of alleles, although their number may be considerable. The following observations may help basically to explain the way in which dominance and blending prevail in the relation in which they do.

Let us consider the following facts: (*a*) the frequency of occurrence of dominance and blending, and the pattern of the blending; (*b*) the fact that the primary properties of the individual gene are those of a DNA molecule; (*c*) the fact that the blending observed allows for an explanation involving a hypothesis based on probability; (*d*) the number of cases in which it has been demonstrated that the recessive factor is not entirely latent (heterozygotes for a number of alleles can be detected); (*e*) our experience with the phenomenon of hybrid vigour; and (*f*) the fact that we have to allow for randomly varying influences on the effectiveness of the biological (developmental) activity of a DNA molecule (of an individual gene)—such randomly varying influences can be expected to prevail to some extent in the cell nucleus. From these and other relevant basic facts referred to earlier we may conclude:

1. The dominance observed is due to a property of the individual gene, of the DNA molecule. It is not due to a property determined by the interaction of the individual genes belonging to an interacting gene group unit responsible for the development of a unit character.

2. There is a positive correlation between the degree of dominance of an allele (of one of a contrasting pair of interacting gene group units) and the number of dominant individual genes belonging to it.

3. A complementary interaction appears to take place between dominant individual genes at different loci. In fact, any individual gene at one locus may to some extent complement or supplement the effect, and may probably also inhibit the action and thus modify the activity, of an individual gene at another locus; so that changing

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

one individual gene by mutation or recombination modifies the effects of many others.

4. Dominance is a property of only a certain proportion of individual genes. The proportion that shows this property is considerable. Dominance appears to be determined by a structural property of the DNA molecule which enables the molecule to minimise the dependence of the effectiveness of its developmental biological activity on random influences.

5. For individual genes which do not show the property of dominance and which belong to a pair of allelomorphic interacting gene group units (to a pair of alleles) the effectiveness of the developmental control activity of such individual genes varies randomly in time, so that the developmental activity of one gene, belonging to one of a pair of alleles, is randomly more or less effective, over irregularly varying periods of time, than is the activity of a corresponding gene belonging to the other allele. This amounts to a random variation of the effectiveness of the developmental control activity of each one of a pair of alleles.

6. The F_1 generation heterozygotes (for a pair of contrasted characters) are often intermediate between the homozygous parents. When the F_1 generation of heterozygotes, showing intermediate variations of the character, are bred together, those of the F_2 generation again display a series of variations of the character in question with a mean not very different from that of the F_1 generation. The blending observed here cannot be explained unless we assume that the development of the intermediate character in the heterozygote is determined by the random variation of the effectiveness of the developmental control activity of each one of the pair of alleles responsible for the development of one or other of the contrasted characters between which this character is intermediate. Reference has been made earlier to evidence that a single character is controlled by a number of individual genes interacting and segregating as a unit. The interacting gene group unit and its unit gene interaction responsible for the development of a particular unit character is transmitted from one generaton to the next as a unit heritable potentiality. While this potentiality is heritable, the particular value of the randomly varying relationship between the effectiveness of the developmental control activity of each one of the pair of alleles concerned, which (relationship value) determines the development of a particular variation (of a particular shade) intermediate between two contrasted characters, is not a heritable potentiality. The particular intermediate variation between the pair of contrasted characters concerned cannot be actually transmitted from any one generation to the next, except by a slender chance. It appears clear that the blending observed can

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

thus be satisfactorily explained. The blending is restricted to the heterozygously developed characters of the crossbreds; while the respective alleles, the contrasting unit gene interactions responsible, do not blend and are transmitted on unchanged. So, the blending in inheritance—which it is certainly unbecoming to doubt—is not a heritable blending. Darwin would have no reason to worry about the "swamping effect of intercrossing" on this account.

Reference has been made earlier to the fact that there is no evidence as to the mode of gene interaction prevailing in the determination of any particular unit character. Conceiving of additive small effects and of quantitative characters, and attempting thus to explain blending as but a complicated manifestation of Mendelian inheritance, is therefore an unfortunate effort.

DIRECTION AND MODE OF EVOLUTION

On account of ample observational and experimental evidence, it has been established by the writer[3] that evolution—the developmental part of the life process—is directed; it is directed towards upbuilding of living ability, which is the ability to survive—to keep alive and propagate—in the face of all possible environmental interferences. This immutable course of evolution has been expressed in *the law of increasing specific living ability*.[4]

The fundamental, determinant and all-pervasive facts concerning the evolutionary process have so far been obscured, chiefly by the following three factors:

1. It has been shown[5] that the life process taking place in such distinct systems as the organisms of the members of a species (and otherwise consisting of energy dissipating transitions of X-energy-quanta, as any natural process does) is immutably directed towards upbuilding of ability to survive, in other words, towards maintaining its own progress, which consists exclusively in upbuilding of ability to survive. This fact appears momentarily to startle and somewhat unsettle each one of us; the very realisation of this fact seems to make the observer, at least momentarily, doubt the soundness of his otherwise long tested reasoning methods. However, once we accept and treat it as just another fact, which our observations literally force us to do, however much we may marvel at it, its momentarily startling and unsettling effect ceases to be a clouding factor.

2. The ability to survive—to keep alive and propagate—in the face of all possible environmental interferences has in the past never been even conceptionally understood as the entity it actually

[3] G. Pantel, 1958 and 1964, *op. cit.*
[4] G. Pantel, 1958, *op. cit.*
[5] *Ibid.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is. Of course, now, when this ability has already (since 1948) been rendered a quantitatively determinable magnitude in living ability units,[6] a major factor clouding evolutionary facts beyond recognition has been removed.

3. Some modes of evolution, such as that of "random" mutations of individual genes, are indeed relatively random. They may remind the observer of a feeler stretched out for an environmental test. Indeed, the specific life process cannot be maintained without adapting the systems concerned to counteract or avert the environmental interferences they may face, which vary critically with time and, for many a species, unpredictably and much at random. Nevertheless, the relative randomness of such mutations is strikingly manifest to the observer. However, another mode of evolution much complementary to that of relatively random mutational change, namely, natural selection, although it favours the survival of the fittest, appears to be an entirely random selective result of environmental interferences and by no means directed, although the environmental interferences could have no such selective result if they operated on a stock showing no heritable variations due to relatively random mutations of the particulate genetic units. Again, on reliable evidence, the interactions of the particulate genetic units (that would maintain any particular direction of evolution, if any direction there be) control the cellular mechanisms and largely determine the degree and frequency of approximation of the cellular energy ratio of mutational liability maximally conducive to any particular random mutation. And how else can we expect an evolutionary process—if directed towards upbuilding of ability to survive—effectively to counteract relatively random, more or less critical, change in environmental interferences, except by relatively random mutational change in the particulate genetic units? Yet the randomness implicit in these two among the modes of evolution is striking enough to arrest the attention of many an observer, so as to make it difficult to see and appreciate the direction of the entire evolutionary process. This may also now cease to have a clouding effect as the particular direction of the specific life process has been established on observational and experimental evidence.

Transitions and transformations of energy—subject to either physicochemical laws or the law of increasing specific living ability—take place within and about, involve exchange of energy with, and more often than not interfere with the energy transformations and transitions constituting the life process progressing in, the genetic material itself, the cell nucleus, the cytoplasm, and the entire organism of, any member of any species. This is the nature

[6] G. Pantel, 1958 and 1964, *op. cit.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of all enviromental interferences, from those concomitant with the particular natural medium (such as water or air) of a species to the interferences presented by individual or group activities of members of other or even of the same species. Environmental interferences vary in extent; yet any such interference, however slight, can prove fatal in a short time unless it is effectively counteracted or avoided.

The selective pressure imposed by a set (A) of extensive interferences prevailing in a particular location and affecting the stock of a species over a long enough period often forces a specialised, more or less advanced, adaptation which is a kind of evolution enabling the stock of the species concerned to counteract effectively (and to keep alive and propagate with great chances of survival under the continued influence of) that particular set of interferences (A).

The stage of such specialised adaptation, although more or less reversible, may well restrict considerably the chances the members of any species so adapted may have to develop ability to counteract effectively another set (B) of environmental interferences with which they may be faced. As an example of environmental interferences (B) we may mention the unaided whole body submersion of an air-breather in water beyond a time limit, or the subjection of the body of any mammal to the force of gravitation unaided at unsafe heigths. We never fail to observe that the stock of a species thus adapted undergoes—under some selective pressure imposed by environmental conditions involving exposure to the set of interferences (B)—the kind of evolution that enables the members of the species concerned not to counteract the interferences (B), maintaining life under their continued direct influence, but rather to avoid effectively (successfully) the exposure to them. As a consequence of this kind of evolution, it is apparent that the set of environmental interferences (B)—such as the ones involved, for example, in drowning or in falling down a cliff—can barely, if at all, be counted among the interferences most likely to set in with a fatal result for the stock of many a species so adapted.

The amount of ability to survive possessed at any given time (in living ability units), as well as the living ability average of a member of any species, depends also on the potentially fatal environmental interferences most likely to set in.[7] Therefore, effective avoidance of exposure to a set of interferences as deadly as (B) builds up ability to survive. Consequently, the development of ability to avoid effectively the exposure to, and the possibility of, such a lethal interference is palpably and accountably a development of ability to survive.

[7] G. Pantel, 1958, *op. cit.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Accordingly it is noteworthy, on the one hand, that the kind of evolution the stock of the species faced with interferences (B) undergoes is not directed towards adaptation enabling the stock to counteract effectively and survive under the continued influence of either the set (B) or the set (A) of environmental interferences. Neither of these two directions would describe the course of this kind of evolution. On the other hand, this kind of evolution is unmistakably and significantly directed; namely, towards upbuilding of ability to survive in the face of all possible environmental interferences, as is the entire evolutionary process.

The course of the life process, as well as that of the evolutionary part of it, is thus directed. The inherent tendency of selective mating in man and analogous selective tendencies in lower species play a major part in determining the course of the entire evolutionary process as the one described by the law of increasing specific living ability.[8] This natural law says: the actual ability of a species to survive—as measured either by the amount (in living ability units) of such ability a representative sample member of the species possesses or by the average ability to survive of a representative sample number of its members—increases as the life process, or any part of it, goes on in each and any number of its members.

Now, the unit characters, which are each produced by a unit gene interaction transmitted from one generation to the next, vary very widely, from the pigmentary (such as skin colour) to the morphological (such as the form, structure and shape of eyes, nose and so on), craniometrical (cephalic index), physiological, biochemical and so forth, to behavioural characters evident in the reaction pattern to a particular sequence of environmental influences, to intelligence (however defined) or specific mental and physical abilities, to accountable tendencies, and so forth.

The development of any one of these unit characters being determined by a unit hereditary factor (by a unit gene interaction), the total number of all the diverse unit gene interactions of an individual is his "genotype" and the corresponding number of unit characters he may show at any stage of development is his "phenotype" at that stage.

Now, any such unit gene interaction by itself, as well as any developed unit character, has a significance for survival and represents a determinable amount of ability to survive, in living ability units;[9] living ability being "the ability to survive, to keep alive and propagate, in the face of all possible environmental interferences." The average of the living ability values attributable to a given unit character in the face of the usual range of varying environmental

[8] G. Pantel, 1958 and 1964, *op. cit.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

interferences, which can be determined, represents the value the character confers on the organism in ability to survive. This living ability value varies widely from one unit gene interaction to another and from one developed unit character to another. A unit character such as a particular blood group, for example, may have little living ability value, while a particular mental ability or tendency may represent a very large amount of ability to survive.

The developed unit character as well as its living ability value depends chiefly and decisively on the unit gene interaction responsible for its development, and to some extent also on the range of environmental influences under which the character develops.

In man, where the unit characters that count extensively, indeed predominantly, for ability to survive are mental and capable of considerable improvement by education and training—and where one can modify one's own environment, while the range of possible variation in social interferences can scarcely be surveyed—any attempt to asses the relative part environmental influence may play in the development of the unit characters is bound to be hazardous.

Such an assessment, however, is much desired and the contribution I may afford to make is as follows. If the total living ability of all the developed diverse unit characters of a man together be 1,000,000 living ability units, no assessment can be expected to ascribe on average less than 80 per cent or 800,000 living ability units to the developmental effects of all the diverse unit gene interactions responsible, or more than 20 per cent, 200,000 living ability units, to the environmental influences under which the unit characters develop; provided that the usual range of variation prevails in the environmental interferences.

MODES OF EVOLUTION

Four modes of evolution, and a possible fifth, can be distinguished, taking account of evidence recently obtained and observations made by the writer; their effects being successively complementary. The five modes are given below in order of the estimated volume of their respective evolutionary effect with particular reference to man:

1. The mode determined by the inherent tendency of selective mating governed by the quantitative assessment of the partner's ability to survive, as traced experimentally by the writer.[10]

2. The mode of natural selection, as described by Darwin.

3. The mode of largely random segregation and recombination of interacting gene group units (of alleles) retaining their identity as distinct hereditary determinants, whatever the successive com-

[9] *Ibid.* [10] G. Pantel, 1964, *op. cit.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

binations in which they may be transmitted, as pointed out by Mendel.

4. The mode of relatively random mutations of rare incidence, occurring in individual genes (de Vries, H. J. Muller).

5. Adaptive mutations of very rare incidence (occurring in individual genes) may be considered as a possible fifth mode of evolution, altnough no satistactory evidence is obtainable.

INHERENT TENDENCY OF SELECTIVE MATING

The prime mode of evolution is determined by the tendency of selective mating. Reference has already been made to experimental evidence establishing its prevalence.

This is the tendency to mate with someone whose gene-conveyed mental and physical potentialities account for the greatest possible amount of ability to survive in the face of all possible environmental interferences. As such a tendency exerts its determining influence upon the choice of both the male and the female while selecting one among their respective possible marriage partners, marriages are always bound to take place between partners whose heritable potentialities account for about the same amount of ability to survive. This consequence constitutes the prime mode of evolution.

This tendency is selective exclusively for ability to survive. Within the limits of accuracy of the average assessment of marriage partners as to the resources of their respective possible partners for survival, this tendency has been shown to be also effectively so selective.

It is now apparent that there is no other inherent tendency or factor that determines the choice of the mating partner in man. Any other tendency observed, such as that of back-breeding, is ultimately but another aspect of the tendency of selective mating and can only be expected to be selective exclusively for ability to survive.

INHERENT TENDENCY OF BACK-BREEDING

It is now evident that the observations which led many (including the writer) to consider a tendency "to mate with someone whose heritable unit characters differ from one's own" have been misinterpreted. According to recent observations made by the writer, preferences of this nature are common among inter-racial and inter-sub-racial hybrids.

In 85 per cent of 34 families studied—of 27 sub-racial and 7 racial hybrids—the preference for a member of a given parent developmental group was found to be demonstrably constant in the accountably comparable marriages that were followed up in successive generations. Detailed results are given in the following Table.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

RESULTS OF INVESTIGATIONS INTO THE MATING PATTERN OF SUCCESSIVE GENERATIONS IN THIRTY-FOUR FAMILIES OF RACIAL AND SUB-RACIAL HYBRIDS

	SUB-RACIAL	RACIAL
Number of hybrid families studied	27	7
Number of families in which marriages were followed up in:		
two successive generations	19	5
three successive generations	6	2
four successive generations	2	0
Total number of marriages followed up	106	20
Number of marriages of back-breeding preference:		
positive	95	17
negative or doubtful	11	3
Number of families in which back-breeding was:		
constant	23	6
not maintained in:		
two successive generations	3	1
three successive generations	1	0

Although the number of cases was small and the racial classification was made largely on readily accessible morphological and behavioural characteristics—relying on the facilities of professional contact—it is evident that the relationship observed prevails among hybrids. This relationship has been found to be consistent with the inherent tendency of such hybrids to breed back into the race or sub-race of either their father or their mother, as the case may be. This is a selective tendency which—under the complementary influence of one or other of the modes of evolution—ultimately reverses hybridisation for the individual hybrid's progeny. The back-breeding tendency of the hybrid is ultimately selective only for ability to survive transmissible to his progeny, and it is in this respect another aspect of the tendency of selective mating.

From the results of relevant investigations[11] into families, which were fairly representative sample cases of a European community with a limited number of hybrids at more or less advanced stages of back-breeding in free association, it appears that the hybrid's choice of the mating partner is made primarily in accord with the tendency of selective mating, the back-breeding tendency

[11] *Ibid.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

being a secondary determinant of the choice. From the same results it became evident that in the comparatively small number of cases involving hybrids of least advanced back-breeding the latter tendency—the tendency to breed back into one or other parent race or sub-race—had proved strong enough to force a bartering accord of the choice with both tendencies.

ADAPTIVE MUTATIONS OF RARE INCIDENCE IN INDIVIDUAL GENES

It is clear, of course, that no environmentally induced modification of a unit character in any part of the body can be inherited in any direct way, since only the genetically determinant material of the nuclei of the undifferentiated germ cells located in the gonads can be transmitted from one generation to the next. The growth of the arm muscles performing the swing of the hammer throughout the reproductive and working life span of a blacksmith is one such environmentally induced change of a unit character. The rise in the concentration level of the melanin pigment maintained in the epidermal cells of a white-skinned individual during a period of exposure to sunlight is another such change. The ability acquired by specialised education, training and performance of a specific mental work of, say, scientific standard throughout the reproductive and working life span of a worker—that is, the ability of the neurones involved to facilitate the mental process underlying the performance—is another. The atrophy of a disused tissue is another.

This kind of environmentally induced change in a developed unit character is each time controlled by the differentiated groups of cells affected, probably assisted by central neuronal activity by way of stimulation and inhibition. The change occurs in a purposeful, adaptive response to a long enough exposure or sustained use or disuse and is obviously directed towards upbuilding of ability of the organism to survive in the face of environmental influences of the particular kind inducing the change. While this kind of environmentally induced change involving somatic differentiated cells cannot be inherited, it can, by releasing a specifically reactive substance into the bloodstream directly, or indirectly by engaging the central nervous system and/or a specific endocrine secretion cycle, increase the degree and frequency of approximation of the ratio referred to earlier and maximally conducive to a particular adaptive mutation of an individual gene of relevant effect contributory to the development of the character concerned in a gonadal cell. And by so doing it can modify the corresponding unit character in the offspring who gets the adaptively mutated gene, so that some degree of the character modification environmentally induced in the parent shows in the offspring, although this degree of modification can only be expected to be very small and barely, if at all, discernible.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There is direct and indirect evidence to suggest that such adaptive mutations may take place. Analogous directed specific mutations have been produced. The appearance of antibiotic-resistant strains of micro-organisms is a popular example of some relevance.

Representative, environmentally induced adaptive modifications of unit characters, involving groups of somatic differentiated cells affected by long enough exposure to a particular environmental influence or by sustained use or disuse, of the kind described above, are usually called "acquired characteristics." Lamarck learned to appreciate the adaptive character of the response in similar observations on plants and animals and was led to postulate the principle of the inheritance of acquired characteristics, which was accepted by Darwin as a factor contributory to evolution. The so-called Mendelians deny this principle for lack of satisfactory evidence.

It appears that no convincing experimental or empirical evidence is forthcoming in support of the Lamarckian principle.

Perhaps it should be made clear at this stage that here we are not concerned primarily with the Lamarckian principle as such. This principle has never been seriously connected with genetical consequence, let alone with adaptive mutations. The occurrence or otherwise of adaptive mutations as such, in individual genes, is a genetical concern which we approach here independently of the Lamarckian theory.

The decisive question with which we are faced is whether or not adaptive, genetically transmissible changes in unit characters take place—such as a grade of variation in skin pigmentation for example—which neither by themselves involve, nor are concomitant with other such changes that do involve, an amount of ability to survive large enough to allow for selective mating and natural selection to operate and establish such a grade of variation in the skin pigmentation of the developmental group concerned. Is there a satisfactory answer to this question? If such changes do take place they can be expected to result from occasional adaptive mutations of individual genes in the way explained earlier.

An evolutionary adaptation to environmental interferences that are peculiar to a given habitat—such as the genetically transmissible adaptation of one's skin pigmentation to the prevailing abundance of sunlight or to the lack of it—can confer on the individual a measure of resources for survival that is either (*a*) large enough to allow for selective mating discrimination and natural selection to operate and establish the adaptive change in the population concerned, or (*b*) not sufficiently large to allow for this selective effect.

Let us ask ourselves the following question. It has been observed that the darker-skinned racial variations of man are found

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in tropical and sub-tropical regions of the earth. Is the amount of ability to survive, which an adaptive, genetically transmissible skin pigmentation change may carry, large enough by itself to allow for natural selection and the inherent tendency of selective mating to operate and darken the skin of the indigenous population of the tropical regions as unfailingly and uniformly and in direct proportion to sunlight exposure as is actually the case? If the answer is "no," how did this result come about? Given a sufficiently long period of time, the occasional adaptive mutation of an individual gene, brought about in the way described earlier, can produce the observed uniform variation of skin colour in full accord with sunlight exposure. However, the answer here cannot be a conclusive "no." The measure of protection a higher epidermal melanin concentration confers in exposure to sun-rays—that is understood to consist in safeguarding against sunburn, sunstroke and skin cancer—is likely to extend over an even wider range.

R. Gayre of Gayre[12] observed that the ancestors of the Caucasoids and Mongoloids, who can be assumed to have moved into northern regions early in man's evolution, have undergone an evolutionary adaptation resulting in a reduction of their pigmentation traits that is graded in accord with the scarcity of sun-rays prevailing in their respective habitats. Gayre suggests that natural selection would operate to establish light-coloured eyes and hair and a decrease in epidermal malanin pigment in a population of northern habitat, if only to allow for the full use of the scarce solar ultraviolet radiation to form sufficient vitamin D and obviate rickets. It is significant that the premises from which this conclusion has been drawn are exceptionally well substantiated. There is generally accepted chemical and aetiological evidence that (*a*) the availability of antirachitic vitamin depends on the activation of sterols by solar ultraviolet irradiation; (*b*) that melanin pigment prevents ultraviolet radiation from activating epidermal sterols to form vitamin D; and (*c*) that the development of rickets and osteomalacia is determined largely, if not entirely, by vitamin D deficiency. Here, the low pigmentation of the northerner—protecting against rickets and osteomalacia—confers upon him an amount of ability to survive that is undoubtedly large enough to allow for selective mating and natural selection to operate and establish such an adaptive trait in a northern population. This evidence is unequivocally in favour of adaptation taking place without adaptive mutations.

On this account it is apparent that there is no satisfactory evidence to indicate that any evolutionary adaptation observed has been brought about by any way other than the first four modes of

[12] R. Gayre of Gayre, "Ethnological Elements of Africa: Part IV," THE MANKIND QUARTERLY, Vol. VI, No. 3, January-March 1966, pp. 123-138.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

evolution referred to earlier—including selective mating and natural selection. It becomes equally evident, however, that it is of little consequence whether we consider occasional adaptive mutations as a mode of evolution or not, since it is clear that their evolutionary effect can only be a very minor one.

Irrespective of the stand we take with regard to evidence or the lack of it here, I suggest that it is advisable to consider occasional adaptive mutations in individual genes as a possible fifth mode of evolution of minor developmental effect; if only because, as explained earlier, the occurrence of adaptive mutations is an accountable possibility.

Evolution of the direction described here could scarcely allow for any other than the five modes of development referred to, to operate. I conclude that the rate at which adaptive mutations may occur can only be very low, thus: as environmental interferences change more or less critically much at random, the probability that a relatively random mutation, which has passed a series of selection tests, may build up specific ability to survive is much higher than is the likelihood of an adaptive mutation building up such ability. Therefore, an evolution directed towards upbuilding of resources for survival can only afford the occurrence of adaptive mutations at a very low frequency, if at all. It can well be imagined how much harm, or evolutionary regress, could be caused by, say, a frequency of adaptive mutations higher than the low one that can be expected to prevail, or by any evolutionary adaptation advanced excessively in a short time by relatively random mutations, selective mating and natural selection (which, of course, cannot happen). The individual organisms involved could thus be so closely adapted to a particular set of environmental interferences that they would be rendered scarcely fit to survive when faced with a somewhat varied set of interferences.

Minute advantages are given a slender chance to be selected after they have been tested over vast periods of time. This is the ultimate pattern of an evolution which is immutably directed towards upbuilding of living ability.[13]

As the specific life process shows no deviation from the course towards upbuilding of specific ability to survive, we may describe and consider this as the immutable direction of the process, whether this course is a physicochemical consequence devoid of direction or not, since in either case it remains the course we constantly observe.

[13] G. Pantel, 1958 and 1964, *op. cit.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Book Reviews

HEREDITY AND THE NATURE OF MAN

By Theodosius Dobzhansky. Harcourt, Brace and World, New York. 1964. Pp. 179. Price $4.75.

This small volume incorporates material presented by the author in lectures before various college groups during 1964 and 1965. The writing is clear and relatively non-technical, and the subject matter should be comprehensible to most educated laymen. At the same time, some acquaintance with biology and genetics would undoubtedly be helpful.

There are four largely factual chapters, "The Nature of Heredity," "Variety of Human Natures," "Race," and "Genetic Load and Radiation Hazard," and a fifth somewhat speculative chapter entitled "Whither Mankind."

In Chapter One, Dobzhansky offers a summary sketch of the basic data of genetics. The treatment is comprehensive. It covers the historical growth of the subject, and ends with an interesting discussion—and rejection—of vitalism. In Chapter Two, Dobzhansky tackles the heredity-environment problem. He points out that in studying a trait we cannot apportion the rôles of heredity and environment neatly in percentages, but that a study of the contributions of heredity and environment to the differences among people is a legitimate enterprise. This, of course, has long been recognized. I think Dobzhansky overemphasizes the rôle of culture and its modifying effects upon hereditary traits. He describes culture as follows: ". . . the sum total of habits, beliefs, customs, language, techniques of doing things, in general, of all that people do or think as a result of having been taught." This collection of activities, which is no definition of course, is straight Boas by way of Benedict. It fails to stress the prior commitment of man's nature in setting the style of these activities. Furthermore, as Darlington has argued, man's genetic constitution determines his environment. The egg still comes before the chicken.

It is in Chapter Three, "Race," that Dobzhansky's equalitarian slant is most evident. In the first part of the chapter, Dobzhansky recognizes the existence of races as authenic breeding populations which are not mutually exclusive like species. The mere acceptance of race as a concept will greatly disturb Dobzhansky's colleague A. Montagu, who considers race to be a myth. I think Dobzhansky makes too much over the discrepancies in the classifications of races by different authors. Basically, all of the lists have much in common, though they differ in length and in their descriptions. It is quite remarkable that differently trained scientists—using a variety of criteria—have reached so much agreement.

Dobzhansky holds that there are no genetic race differences in physical, mental or personality traits. Strict adherence to the liberal-equalitarian dogma leads him into dubious and highly specious statements. Where measures of brain weight, volume and degree of fissuration have been taken on large numbers, the mean is *always* in favor of the Caucasoid over the Congoloid. To be sure, brain weight depends (as Dobzhansky proclaims) on body size, and there are clinical accounts of small brains in the mentally able and large brains in the feeble-minded. But the mean is the typical measure and is the only figure which can legitimately be used in racial comparisons. Brain size and complexity varies regularly as we go from lower to higher species. There is every reason for believing that the correlation between brain and intellect is high.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

As to intelligence, Dobzhansky admits that the intelligence test is useful in predicting the quality of school work. This is true, of course, because the mental test measures the ability to manipulate symbols (words, numbers, diagrams, formulas and the like) in the solution of problems. Abstract intelligence is the *sine qua non* for the existence of a civilized society. Fifty years of research with mental tests in the U.S.A. have revealed regular, persistent and statistically significant mean differences between Negroes and Whites. And this lag in abstract intelligence among Negroes is forecast by the dearth of scientific, literary and artistic achievements over 5000 years of African history.

Personality characteristics (roughly, temperament) are almost as valuable as abstract intelligence in creating a civilized society. Personality traits in man are hard to identify and to measure. But they can readily be observed, and with accuracy, in the lower species. An example will be helpful. Different breeds of dogs exhibit markedly different temperamental traits which are genetic; and breeds are roughly analogous to races. Through selective breeding, dogs are found which vary in temperament from the placid St Bernard to the nervous, fussy terrier. Dogs have been bred for intelligence (collies), and for savage boldness (police dogs). These traits are of course deliberately sought after by the breeder. But Nature (climate, terrain, food supply and so on) has bred a hardy self-reliance and keen intelligence in the European and a *laissez faire* and indolence in the African south of the Sahara. There is no reason why Nature cannot breed as selectively as man, although the environment can only work what the genes provide.

Several specific citations will show how Dobzhansky tends to explain away racial differences when found. In the case of the American Negro, he calls repeatedly for "equality of opportunity." This, he insists, is necessary before fair comparisons with White Americans can be made. But this cliché is really meaningless without elaboration. If opportunities are objectively the same they cannot be equal for two boys who differ markedly in endowment. And by the same token a task equally difficult for these two boys will not be objectively the same. Dobzhansky's demand for a "culture free" test is quite futile. What would be the meaning of differences found in these puzzle-like devices? It's a little like testing in a vacuum.

Dobzhansky relates (p. 105) that the poor showing of Negro soldiers on the Army tests in World War I "delighted" the racists who accepted this as "proof" of Negro inferiority. He then repeats the old wheeze (a favorite of Weltfish and Montagu) that Negroes from Northern States rated higher on the average on the Army tests than did Whites from Southern States. Dobzhansky does not add that the equalitarians were so delighted with this finding that they have quoted it over and over with varying degrees of inaccuracy.

This comparison is invalid and the conclusion drawn from it is false. About 15 per cent of Negro soldiers overlapped the White median on Army Alpha. The correlation of Alpha with educational level was .70, which is quite high. Hence if one selects a very few—not all—of the better educated Negroes from the top of their distribution, and a very few—not all—of the most poorly educated Whites from the bottom of their distribution, a difference must be found. In the present case it is interesting to note that the differences were almost negligible, despite the extreme selection in the two groups. One might well argue that the poorly educated Whites did as well as the better educated Negroes—thus showing that education effects Whites as well as Negroes.

Dobzhansky says we can be sure of one conclusion: namely, that differences within either racial group will be greater than differences between the means of the two groups. This is always true when two groups can be compared on a common scale. It is almost like saying that 10 is greater

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

than 5. We can, of course, select two very extreme groups for some trait so that the mean difference will be greater than the ranges in either group. But such a comparison would be meaningless.

Dobzhansky condemns apartheid and segregation out of hand. I do not know what he knows about apartheid (personally I would prefer it to life in a Congolese mud hut), but I doubt whether a Russian-born geneticist naturalized in 1937 can know much about the assets and liabilities of segregation. Segregation was an almost unique American institution. The end of the Civil War left nearly 4,000,000 Negroes in the South with no Marshall Plan or "Great Society" to help them out. Most of these Negroes were illiterate and many were only a cut above savagery. Acceptance of these unfortunates as "social equals" would have been disastrous; and they could not be returned to their native Africa from whence their own brethren had sold them as slaves to northern slave traders. Segregation proved to be a tolerable and—for the Negroes and the Whites—acceptable way of life. The Negro was protected, fed, clothed and taught by the White man. It is easy for ideologues to dismiss all this as racism with a wave of a hypocritical hand, but segregation served a good purpose for 100 years.

Chapter Four, "Genetic Load and Radiation Hazard," leaves speculation for fact. It emphasizes the value of mutation in the evolutionary scheme, and the dangers of radiation on the genes. The final chapter, "Whither Mankind," gives Dobzhansky's ideas of how evolution is proceeding and where we are going. The material is interesting but not always convincing.

On the whole, this book is well worth reading—especially the parts dealing with genetics in which the author is well versed. Dobzhansky's counter-racism must be carefully evaluated in the light of his liberal-equalitarianism, and his dogmatisms must often be questioned.

HENRY E. GARRETT.

THE ROMAN CONQUEST OF BRITAIN: A.D. 43-57

By Donald R. Dudley and Graham Webster. B. T. Batsford, London, 1965. Pp. 216, 48 illustrations. Price 30s.

This is an excellent account of the Roman preparations for invasion, the organisation of their army, and the eventual conquest of southern Britain.

There are one or two points on which one may have reservations. In speaking of the Celtic use of the chariot the writers suggest it was more a nuisance than of real value against the disciplined Roman infantry legions. However, after discharging their spears the Roman infantry had only their short stabbing swords, and such horses and chariots that got through could cut them to pieces. When used properly to smash their way through, and not just to harass the enemy, the Celts had a weapon far superior to the elephant cohorts of the Romans. This was proved at the Battle of Mons Graupius when the Pictish King Galgacus signally defeated the Roman invaders of northern Britain and ended their attempted conquest.

One point which the authors bring out by quoting Roman inscriptions is that the great Roman Empire—which was more stable and lasting than all the great empires which have succeeded it—was based upon tribalism. Not only were the chiefs of clans the members of the Senate but, moreover, no one could vote except through his tribal franchise. It is salutary to remember this at a time when the European peoples all over the world are putting on all the pressure they can to de-tribalise large areas of Africa and elsewhere. South Africa and Rhodesia are in the tradition of Rome, as was northern Nigeria under Lord Luggard, and it is likely if Rome's experience is anything to go by that what the tribal system builds will be

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

more lasting than mock "Westminster" and "Congress" methods of government dependent on the destruction of the organic structure of the societies in which they are artificially implanted.

THE LEGACY OF ARTHUR'S CHESTER

By Robert B. Stoker. Covenant Publishing Company, London, 1965. Pp. 156, frontispiece, 11 figures, 8 genealogical tables. Price 21s.

This book is basically a plea for the Caerleon of King Arthur being Chester and not Caerleon-upon-Usk. We need not doubt the veracity of Giraldus Cambrensis—who describes the extensive Romano-British remains at Caerleon-upon-Usk—since Chester was captured and re-captured time and again, and so was largely destroyed, in the Anglo-Saxon attacks which drove the Britons west. Consequently, even if Chester had been a greater and metropolitan city, much fewer remains of this would survive into medieval times.

The supposition is highly reasonable that Chester was the metropolis of post-Roman Britain before it was overwhelmed by the German invaders.

Much of the book concerns early Celtic Christianity; and there is little doubt that the author is largely right as to its authentic antiquity. It contains some useful genealogies: Welsh, Saxon, Norman and Scottish. Despite some minor errors and a lack of clarity in some places, this is an interesting book, particularly for the history of Chester.

MYCENAEANS AND MINOANS: AEGEAN PREHISTORY IN THE LIGHT OF THE LINEAR B TABLETS

By Leonard R. Palmer. Faber and Faber, London, 1965. Pp. 368, 20 plates, 49 figures. Price 36s.

This is a very important contribution to the ethnology of early Greece and Crete, especially in connection with the Linear A and B scripts. These learned investigations show that Anatolia was occupied by Aryans, Luvians and Hittites, and that the former spread in Greece before the arrival of their fellow Aryans of another branch, the Greeks. To these pre-Greek Luvians such names as Parnassos are to be attributed. The Greeks themselves arrived in Greece in the sixteenth century B.C. Meanwhile the same Luvians had settled in Crete, and they were not dominated by the arrival of Greeks until the fourteenth century B.C. The Trojans appear to have been related to the Parnassos folk who settled in Greece before the Greeks and who, no doubt, were absorbed with them and Hellenised.

It is to the Luvian period that the Linear A script is to be attributed in Crete, Linear B being coincident with the Greek dominance. Much of the book is devoted to an account of the hieroglyphics and syllabic scripts involved.

RACIAL CONTOURS: THE FACTOR OF RACE IN HUMAN SURVIVAL

By H. B. Isherwood. Times Longbooks, Douglas, Isle of Man: Sidgwick and Jackson, London, 1965. Pp. 423. Price 18s.

In this book Mr Isherwood challenges those who in recent years have made it their business to minimise not merely the importance of race but its very existence. He does so very effectively, thus providing a useful corrective to many of the popular and semi-popular works written in that vein.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Quite rightly the author takes to task the high priest of the environmentalist anti-heredity cult, Franz Boas (p. 14):

> Franz Boas evidently failed to see clearly that his Eskimos (and other races) were being eliminated as a separate racial group because their exclusively-evolved racial characteristics were ill-adapted to the social forms and alien habits being thrust upon them.
>
> Despite his views and those of his disciples, racial aptitudes are not uniform and a minute variation in hereditary ability, an evolutionary deflection, could produce far-reaching cultural and historical changes. To a large extent scales of intelligence, the functional capacities of the brain, are inborn, implanted and fixed by virtue of their evolutionary value and this is necessarily reflected in behaviour, in social and intellectual achievements.

Mr Isherwood points out (p. 18) that the facile argument for confirmation of the oneness of the races of men because they share the same blood groups is no argument at all, as men share some of these with apes and monkeys "and, according to J. B. S. Haldane, it may be no more dangerous to have a transfusion of blood from a chimpanzee than from your own brother." While this trite statement by Haldane corrects the monoracist view by restoring a certain amount of objectivity it is for all that not really true unless we emphasise the *may*, the subjunctive mood. In general it would be more dangerous, as Scudder has pointed out, but nevertheless need not necessarily be so in all cases.

Answering the argument that the fact that the newborn Negro baby is not so dark or black as its parents is proof of Black-White biological affinity, he points out that this is equally true in the case of the newborn chimpanzee (p. 19)!

After this introductory matter the author takes his reader from the prehistory of the races of mankind to the consideration of modern ethnic groups —Jews, Scots, English and others—and finally to developments in Africa and elsewhere under the "wind of change" which has not only created new states everywhere but has far too often fanned the flames not merely of Negroid nationalism but also of Black racialism.

In the end Mr Isherwood comes to discuss race and prejudice, and deals with such questions as why today a White girl will marry a Negro against the wishes of her parents—which, probably quite rightly, he attributes to a perversion of the protective maternal instinct.

This is a forceful book, full of meat, dealing with vast problems in a very readable and objective manner.

DAILY LIFE IN ANCIENT INDIA: FROM APPROXIMATELY 200 B.C. TO 700 A.D.

> By Jeannine Auboyer. Translated from the French by Simon Watson Taylor. Weidenfeld and Nicolson, London, 1965. Pp. 344, 31 plates. Price 42s.

This very illuminating book is an objective presentation of ancient India within the period discussed. The writer understands clearly the fact —which some special pleaders today seek to deny—that the caste system is a racial one, and she has no hesitation in saying (p. 22):

> The consequences of the *karma* are not limited to the moral or eschatological order, but apply to the entire universal order or *dharma* and, consequently, to the social structure of the Aryan world which reflects this universal order and which is based upon a division into castes. This notion does not appear in the most ancient Vedic texts, but

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

there is no doubt that the Aryans imposed it gradually by codifying it to an ever greater extent, with the object of maintaining a racial—one might even say racist—distinction between their own supposedly pure race and that of the populations whose territories they had invaded. This theory seems borne out by the name *varna*, colour, which was used to designate the groups catalogued in this way.

The author points out (p. 28) that the Shudras, the fourth caste, who were "reborn" to serve the other three castes, included in Vedic times the dark-skinned natives whose country had been settled by the White Hindu invaders. To this caste poor Aryans also became attached.

The fact of the matter is quite clearly that the Shudras were the half-breeds. They were below caste level, were considered impure and were not allowed to take part in public rites, and yet because they showed some of the blood of the conquerors were included within Hindu society. They were therefore different from the harijans, untouchables or outcastes of our times who are of aboriginal blood, Hinduised, but excluded from the social structure of caste Hinduism altogether.

The mere presence and sight of an outcaste was—and to some extent still is in some quarters—polluting to a caste Hindu. All menial and despised work has to be done by them.

It is clear, therefore, that Hindu society worked out a racial *modus vivendi* for the Caucasoid Hindus (Brahmans, Kshatriyas and Vaishyas), the half-breed Shudras, and the dark non-Caucasoid "outcastes" at the bottom of the social structure.

The author also brings out the situation of those who have committed the sin of marrying out of caste (p. 33)—for which some pressure is generated today under "progressive" stimulus. They were treated as a clan on their own, nearer to the Shudras than to the untouchables.

It would seem that slavery renewed the Caucasoid blood of the Aryan rulers of India as the slaves of the Harems (including no doubt some taken as concubines and others employed as guards) were *Yavani*—Ionians, or Greeks and other western women, later supplemented by Persians (p. 33). It seems from this account that Hindu laws on slavery were, by the times of which we speak, singularly humane (pp. 35-36).

Bearing on the question of racial contact it should be remembered that the Roman fleets had contacts with India, and Indian kings and merchants had fleets which linked the Mediterranean world to China (p. 75 ff). Indian sources mentioned vessels which carried from 200 to 700 passengers and crew, as well as cargo (p. 76), and it is interesting to learn that even in those days the passengers had to have passports (p. 77).

It is quite clear that we have misunderstood the maritime capacities of the ancient powers, obsessed as we are with our own concepts of progress. Whether we are dealing with the Indians, Chinese, Phœnicians, Greeks Romans, Celts or Vikings, we should remember that their navigators regularly undertook very lengthy voyages.

Macdonald Printers (Edinburgh) Limited
1 & 2 Richmond Lane, Edinburgh 8

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

DOWN UNDER COMES UP
WITH A NEW JOURNAL

AUSTRALIAN INTERNATIONAL NEWS REVIEW

Australian International **NEWS REVIEW** offers factual reporting on foreign affairs, politics and Australian news.

Spiced with sections on the arts, entertainment and sport, Australian International **NEWS REVIEW** is exciting, interesting reading.

Published Fortnightly—World-wide Circulation

SPECIAL OFFER
TO READERS OF THE MANKIND QUARTERLY

A free introductory copy of Australian International **NEWS REVIEW** will be sent on request. Write to the publishers for your copy.

U.K. Subscription For One Year (26 Issues)

Surface Mail	Airmail
£2 2s	£7 16s

Publishers:

AEGIS PUBLISHING PTY. LTD.,
AEGIS HOUSE, 28 ALFRED STREET,
MILSON'S POINT, N.S.W., AUSTRALIA.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Genealogy, Genetics and Racial History
are inter-related subjects

You will, therefore, be interested in

THE ARMORIAL

AN INTERNATIONAL JOURNAL OF
GENEALOGY AND HERALDRY

published quarterly by
THE ARMORIAL

1 Darnaway Street, Edinburgh 3, Scotland

Price 6s ($1.25) a copy : 21s ($4.00) a year
£3 ($11.00) 3 years

Population Review

A JOURNAL OF ASIAN DEMOGRAPHY

Editor: S. CHANDRASEKHAR

The contents of the TWELFTH ANNIVERSARY ISSUE *include*:

The Crowded World by Sir Julian Huxley; Population Growth in the United States by Professor Philip M. Hauser; The Causes of Poverty: a Clinical View by Dr John Kenneth Galbraith; Population and Freedom by Professor Joseph J. Spengler; The Indians of British Guiana by Dr G. C. L. Bertram; Population Problems in a Developing Economy by Professor S. Chandrasekhar; The Ethnic Groups of Malaya: a Population Study by Dr Mukul K. Dey.

Published by
INDIAN INSTITUTE FOR POPULATION STUDIES
GANDHINAGAR, MADRAS-20, INDIA

Price Rs 5. *Annual Subscription* Rs 10 · £1 · $4.00

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

GENUS

The Review of the ITALIAN COMMITTEE FOR THE STUDY OF POPULATION PROBLEMS *and of the* ITALIAN SOCIETY OF GENETICS AND EUGENICS. *Edited under the auspices of the National Research Council.*

Genus accepts scientific articles, papers, notes and communications written in Italian, English, French, German and Spanish in the field of the different sciences related to population problems (Demography, Sociology, Economics, General Biology, Genetics, Eugenics, Anthropology, Social Hygiene, Psychology, Geography).

3000 Lire U.S. $6.00

Orders should be addressed to: SEGRETERIA DEL COMITATO ITALIANO PER LO STUDIO DEI PROBLEMI DELLA POPOLAZIONE—Via delle Terme di Diocleziano, 10, ROME, ITALY.

THE MANKIND QUARTERLY

SUBSCRIPTION RATES

Single issues—7s 6d ($1.50); annual subscription (4 issues)—£1 5s ($5.00); three year subscription (12 issues)—£3 10s ($14.00). Post free by surface mail. Copies will be sent by air mail on payment of 5s ($0.75) for each copy ordered, additional to the above payments. No responsibility can be accepted for copies lost in the post after dispatch.

CONTRIBUTIONS

All material submitted for publication in THE MANKIND QUARTERLY must be fully and finally corrected, and must be in clear, double-spaced typing, preferably in triplicate. A short biographical note and a suitable photograph of the author may be sent with an article for inclusion if space permits.

1 DARNAWAY STREET, EDINBURGH 3, SCOTLAND

The Editors do not accept responsibility for the views expressed by individual contributors.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

UNIVERSITY OF EDINBURGH

At no time in our history has the need for higher education been greater: at no time has the demand been more insistent, or the requirements more exacting. The scope and content of many aspects of scientific learning has more than doubled in the course of a generation; and with the growth of science a corresponding efficacy in the process of general and humane education has become essential.

The University of Edinburgh, conscious of the immensity and responsibility of its task, is painfully aware that its physical assets, in the shape of laboratories, classrooms, ancillary accommodation, and the necessary equipment, are inadequate and out of date.

These things cost money. Though much will be provided from Government sources, the University itself will have to meet the cost of a substantial part of its building programme, which, over the next few years, will involve the expenditure of many millions of pounds. To this end it is making an Appeal to all its graduates and friends, and has already raised more than £600,000. Still more is required if our young men and women are to have the education they desire and deserve.

All contributions will be most gratefully acknowledged, and full information on the University's needs and plans, with advice on methods of contributing, will gladly be sent on application to the Secretary to the University, Old College, South Bridge, Edinburgh 8.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED